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THE CANADA MEDICAL RECORD.

VOL. XII. MONTREAL, OCTOBER, 188[illegible] No. 1

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Original Communications.

REMINISCENCES CONNECTED WITH THE MEDICAL PROFESSION IN MONTREAL DURING THE LAST FIFTY YEARS.

BY A. H. DAVID, M.D., Edin., L.R.C.S.E., D.C.L., Emeritus Professor of Practice of Medicine and Dean of the Faculty of Medicine Bishop's College.

(Read before the Medico-Chirurgical Society, October 5th, 1882.)

MR. PRESIDENT AND GENTLEMEN,—I entered upon the study of Medicine in January, 1829, being, as was then required by law, indentured for four years to Dr. William Caldwell, and the leading medical men in Montreal were: Daniel Arnoldi, J. B. Labourdais, Wm. Robertson, Wm. Caldwell, Robert Nelson, H. P. Leodle, A. F. Holmes, Wm. Pardey, Henry Mount, John Stevenson, J. B. C. Trestler, Benjamin Berthelet, James Campbell, W. J. Vallee, J. B. Meillieur, O. T. Bruneau, C. G. O'Doherty, Charles H. Castle, F. C. T. Arnoldi, Pierre Beaubien, Sam. Waller, and several others whose names have escaped my recollection. Drs. Caldwell and Robertson had the principal English practice, and were both retired Medical Officers of the Army. Dr. Roberston settled in this city in 1815 and Dr. Caldwell in 1817.

These two gentlemen, with Drs. A. F. Holmes and John Stephenson, about the year 1818 I think, were active in establishing a hospital for the English-speaking inhabitants, as from the increasing population of the city, which then was about 30,000, the Hotel Dieu Nunnery, as it was then named, was found to be too small. With the assistance of our merchants a house was hired, and a hospital was opened on a small scale; and after one year's trial it was found to effect so much good that, to give it a permanency, a subscription was opened to raise money to purchase a piece of ground and erect a building, which was done; and in 1821 the centre building of the Montreal General Hospital, on Dorchester street, was built; and it was opened for the reception of patients in 1822, and Drs. Leodle and Lyons were associated with Drs. Robertson, Caldwell, Stephenson and Holmes as Attending Physicians. In this same year these gentlemen, having a hospital for clinical teaching met together, and decided to open a School of Medicine with the following staff:

Anatomy and Physiology, Dr. Stephenson.
Chemistry and Pharmacy, Dr. Holmes.
Practice of Physic, Dr. Caldwell.
Midwifery and Diseases of Women and Children, Dr. Robertson.
Materia Medica, Dr. Leodle.
Surgery, Dr. Stephenson.

and in the course of the summer, Botany was added, and taken by Dr. Holmes.

This school was entitled The Montreal Medi-

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cal Institution, and the first prospectus was issued on the 4th February, 1823, but, unfortunately, I believe no records can be found of the first session, 1823-24; but at the second session, 1824-25, there were *twenty-five* students in attendance on the lectures. This Montreal Medical Institution in the year 1829 became the Medical Faculty of McGill College, and which it is still. During these four early years of the Montreal Medical Institution Dr. Leodle retired from the Faculty, but I have reason to believe he never gave a single lecture, and Dr. Lyons was appointed in his place, but he only held the position for a very short time; and in the session of 1830-31, when I first attended, there were only the four original teachers, Drs. Caldwell, Robertson, Holmes, and Stephenson, and the class consisted of about thirty students—of these I believe but five are still alive: Drs. Roderick Macdonald of Cornwall, Joseph Workman of Toronto, Hamilton D. Jessup of Prescott, Frederick W. Hart somewhere in Louisiana, U.S., and the writer.

We had a Student's Medical Society, of which the professors were patrons, but I never had the pleasure of seeing any one of them at any of the meetings. I place before you the diploma I received on being admitted a member, thinking it may not be without interest to you, gentlemen, in this advanced age to see how we used to do things fifty odd years ago in this then small, insignificant town, before we aspired to rank as a city or to be the leading medical teaching city in our new Dominion, with our vast hospitals, with two English and two French schools. Amongst them I am proud to say only a healthy generous rivalry exists which will, I sincerely trust, always continue so, to the benefit of rising generations who must occupy the position we now do, when we shall have shuffled off this mortal coil and be known here no more for ever.

Drs. Holmes and Stephenson were both natives of this city, and both graduates of the University of Edinburgh, which was then the foremost medical school of the world. I think it was about the year 1813 these two young men left this their small town for that city. Dr. Holmes returned to Montreal in 1816, but Dr. Stephenson did not get back for some years later, and only obtained his license to practice in 1821, Dr. Stephenson was born with cleft palate, and was operated upon in Paris by Baron Roux, and was, I believe, the first case upon which that eminent surgeon operated for that disease; and in consequence of the success of the operation Dr. Stephenson was well known by all the leading medical men of both London and Edinburgh: he never spoke distinctly clear, but sufficiently so as to be well understood. Dr. Holmes many of those present here to-night recollect well. He was a quiet, learned, unassuming man; Dr. Stephenson was loud, boisterous and not always too courteous, particularly to the students. They both enjoyed good reputations, and had large practices.

Dr. Caldwell was tall, erect and very gentleman-like, but he had a stern countenance, although of a very mild, amiable disposition, and was constantly doing good. He was keen in discernment, cool in judgment, sagacious in expedient, and kind in counsel, he was, in fact, a physician of the highest order. From his severe cast of countenance most of the students were afraid to approach him, and as a little incident of this I will relate an affair that took place in the Montreal General Hospital in 1829. When Dr. Caldwell entered upon his term of duty at the hospital in November of that year not one of the students attending had applied to him for his dressership, and after waiting patiently for some three or four days he said to me one morning in his surgery, "I want you to come up to the Hospital to-day at 12 o'clock," and accordingly I went. He came in a few minutes after and said to the House Surgeon, "Give Mr. David the tray." I may mention in those days the dresser had to carry a tray with sponges, plasters, ointments and lotions, etc., etc. I was told to follow the Dr., and in all the cases that required to be dressed Dr. Caldwell did it, showing me how, and telling me what had to be done next morning by the time he made his visit. Thus was I installed "dresser", without my having taken out my ticket, as I was only a beginner in the study of medicine, and much, as you may well fancy, to the disgust of the older students, many of whom would have much liked to have been his dresser. Dr. Caldwell died in January, 1833; and here I would wish to correct a mistake as to the cause of Dr. Caldwell's early death, as stated on the memorial tablet erected by the Governors of the Hospital to his memory. Dr. Caldwell did not die "a sacrifice to typhus fever," as stated, but of "gangrene of the lungs." I speak authoritatively, as I had the melancholy duty of making the *post-mortem* for the medical friends present. Notwithstanding what I have said of Dr. Caldwell's stern appearance

he was much liked and respected by all the students, and when he was buried, the students, with the consent of the friends, took the horses from the hearse, and drew it all the way to the burying-ground. In connection with Dr. Caldwell's death, I may mention that I have always been under the impression that fright or fear was the origin of his disease. I am certain it is in the knowledge of all gentlemen present that Montreal was devastated with Asiatic cholera in 1832. The first case appeared on the 8th June of that year, and out of a population of 32,000 over 4000 fell victims to that dreadful disease. After the first few weeks Dr. Caldwell became so frightened at it that he would not go to any case, but sent me, his senior student, to all and every one of his patients, no matter what the disease. Consequently I was worked to the utmost of my capacity night and day, and, as I said, I *do* think it was the great depression caused by his fear of taking cholera that produced the debility which ended, a few months afterwards, in gangrene of the lungs. This, together with a visitation of severe typhus fever, which broke out here in the winter of the same year, completely knocked him up. Four of his students died of it, and the writer was the only one of his students attacked who recovered. The deaths among the students amounted to over thirty, so violent was the epidemic that prevailed here after the cholera had subsided. Dr. Caldwell was an impressive lecturer.

Dr. Robertson was a quiet gentleman, never contradicted anyone, would rub his left elbow and say, "Yes, yes. I believe you are right, but I don't interfere in these things." He was a very good lecturer, and was much liked by the students.

I have already alluded to Dr. Stephenson's brusqueness to the students, and will now relate one little affair. The Lectures of the Faculty were delivered in a narrow house of three storeys that was situated about where the west end of the present Montreal Bank now stands; it ran through to Fortification lane, on which was the dissecting room. Subjects were scarce in those days, and the students had to resort to resurrectioning to obtain the necessary material. One night some of the students went out and obtained three subjects, and when we brought them in, went to Dr. Stephenson's house to ask him for the key of the dissecting room so as to place them there, but he refused to give it to us, or to allow the bodies to be placed there, and sent us off with "a flea in our ear." We did not know what to do, so after some consultation I had them put into my hayloft, where they remained over a week. The next day, when told of the circumstance, the students held an indignation meeting and passed resolutions condemning Dr. Stephenson's conduct, which were sent to the Faculty, but we never heard what it did in the matter, although Dr. Stephenson treated all of us much better afterwards. Six of us hired an old wooden house in Craig street, nearly opposite where the *Post* newspaper office is, and dissected all winter on our own hook, but Dr. Stephenson, as Professor of Anatomy, gave all of us our certificates, and mine, when I went to Edinburgh, was received as qualifying for the Examination of the Royal College of Surgeons and of the University for the Degree.

Dr. Holmes many here present will recollect well, he died in 1860. He was a quiet, learned man and an able Lecturer. It was said of Professor Hope, who held the chair of Chemistry for very many years in the University of Edinburgh, that he was the most skillful manipulator in the world, and the same can be said of Dr. Holmes. I believe he was never known to have failed in any experiment he ever attempted before the class. After Dr. Robertson's death in 1844, Dr. Holmes became the Professor of Medicine, which position he held till his death in 1860. These are a few of the striking peculiarities of the founders of the Medical Faculty of McGill College, and they are reported to you in all reverence and respect for them, their talents and abilities. They all were an honor to the Profession, and would, even in what we are apt to term "this advanced age," have held as high and leading a position as they did fifty odd years ago. I am as certain as any one can be of the fact that it is to the example, conduct and lessons of these gentlemen, who educated the generation of Medical men who were to succeed them, that the Profession of Montreal stands as high to-day as it does. These gentlemen have passed through life's great tragedy, and fallen before the grim power against which they had waged for years a successful conflict; their success is our heritage, and their achievements our pride.

The next distinguished man that I shall speak of is Robert Nelson. This gentleman in his earlier years devoted himself to Anatomy and Physiology, and wrote an elaborate work on the latter subject; but, after devoting many years to its compilation, the whole of the manuscript was stolen from him,

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and he never had the courage to rewrite it, and thus it was lost to the world. In his after years he devoted himself to Surgery, and was celebrated as a surgeon the world over. Unfortunately, he became implicated in the troubles of 1837–38, and fled the country. During the whole of his career in Montreal he had a dissecting room in the upper part of his house, and always had several students in his office or surgery, as he used to term it in those days, when all practitioners dispensed their own medicines. In 1822 he tied successfully the carotid artery of one of our wealthy merchants, who in a fit of despondency attempted to commit suicide by cutting his throat. When I was a student I witnessed him perform lithotomy 7 or 8 times, and I have heard it stated that during his career in Montreal he had performed that operation 39 times with only five deaths. You are not from this to conclude that stone in the bladder is a common disease in this country, for it is not, but Dr. Robert Nelson's reputation as a successful operator was so extended that patients flocked to him from all quarters far and near. He died at the advanced age of 79 in 1873, and his son, Dr. C. Eugene Nelson, of New York, has, in memory of his father, founded a Surgical Medal, (gold) in the Medical Faculty of Bishop's College, Montreal.

Dr. Daniel Arnoldi and his son Thomas were both distinguished physicians, and gifted with rare natural talents. Dr. Daniel Arnoldi was the first president of the College of Physicians and Surgeons of Lower Canada, and the present College has a splendid portrait of him, which is kept at present in the Laval University, Quebec. The honorary degree of M.D. was conferred upon this gentleman by McGill University. The son, Tom Arnoldi, as he was always called, was one of the founders of the Montreal School of Medicine, and was a colleague of the writer's in the St. Lawrence School of Medicine, as lecturer on Midwifery. It was Tom Arnoldi who first recommended the use of pure nitric acid in whooping cough and asthma, and for publishing a book some years after on this treatment, Dr. George D. Gibb, then of London, England, but previously of Montreal, obtained great celebrity, but I regret to have to say he did not give his old friend and colleague the credit of the discovery.

When Dr. Caldwell died in 1833, as I have said before, Dr. Robertson took the chair of the Practice of Medicine, and Dr. John Racey (who was senior student with Dr. Caldwell when I began, and left that year for Edinburgh), who had returned the previous year, was appointed lecturer on Midwifery in Dr. Robertson's place, but Dr. Racey returned to his native city (Quebec) in 1836, and Drs. G. W. Campbell and Archibald Hall were added to the Faculty, Dr. Campbell getting the chair of Surgery, which he resigned only a few short years ago, and Dr. Hall that of Materia Medica.

Dr. G. W. Campbell, whose sudden and unexpected death occurred on the 30th May last in Edinburgh, where he was on a visit, came to Montreal in the year 1833, and here he remained, respected, honored and beloved by all. He may be said to have been the teacher of nearly the whole of the present generation of practitioners of this city and other places, all of whom always looked up to him with reverence, and to whom *he* was always ready to give a helping hand. His familiar and well-known face will be missed for many a long day, and his death sincerely regretted by thousands.

In 1831, three Montrealers who had been in Edinburgh returned and settled here: James Bell Johnston, who has been residing in Sherbrooke for many years; James Robertson, son of the Dr. Robertson already spoken of, but he died shortly after his return, and Thomas Walter Jones, and during the following years Drs. John Racey, Archibald Hall, Edward Quincy Sewell, Stephen Charles Sewell and the writer.

Dr. James Crawford, who was afterwards a professor in McGill College, left his regiment, the 24th and settled here in 1834. He was killed in 1855 by being thrown out or rather by throwing himself out of a carriage on returning from his visit to the Montreal General Hospital, the horse having run away.

In 1833, Dr. Michael McCulloch, who had been practicing at St. Eustache for some years, came to Montreal and opened a drug store in Notre Dame street, nearly opposite to where Devins & Bolton's store now is. He was a jovial good fellow, and was well known in Montreal. His store soon became the resort of all the leading men, who used to "drop in" to talk over the news of the day. From this he laid the foundation of a very large and lucrative practice, and this was the way it happened. Sometimes some of these friends would not feel very well, and would relate their aches and pains to the good Doctor, who replied that he would give them some *powders* that would soon put them all right, and he only charged for the medicine and

not for his advice. Sometimes these pooders did good, sometimes these pooders did not do any good or give any relief, and Dr. McCulloch had to be sent for during the night. Of course the Dr. had no alternative but to go, as he had prescribed the day before. He told the patient he had better send for his own medical attendant early in the morning, and tell him that *he*, Dr. McCulloch, had been called to him during the night. This, of course, was done and so it came to pass that Drs. A, B or C stopped at Dr. McCulloch's store next day and took him with them to visit the patient. The public soon began to notice this, and came to the conclusion that Dr. McCulloch must be a "wonderfully clever Doctor," as all the other Doctors were calling him in consultation, and it was this that led to his large and lucrative practice, and caused him to dispose of his drug store and confine himself entirely to practice. A few years afterwards Dr. McCulloch was appointed to the chair of Midwifery in McGill College, and received the honorary degree of M.D. from that institution. He was also elected one of the physicians of the Montreal General Hospital but he never undertook the duties of that office. He died of cholera in 1854.

In connection with this account of the way Dr. McCulloch gained his large practice, it may not be uninteresting to relate to you "the dodges" which two other practitioners resorted to, to increase their name, fame and practice. It is proverbial that some medical men resort to expedients for this purpose—they sometimes succeed, but as often fail. In the days of which I am now speaking we all drove ourselves in our old-fashioned gigs—we did not have liveried servants to drive us, so as to be able to carry our visiting list in our hands to hold up to the public, and to occasionally open and become deeply absorbed in its contents, as if we had eighteen or twenty patients to visit, when, were the truth known, we have actually only one or two to see—but this is not the anecdote I want to tell you. One of the gentlemen referred to was very religious and devout, and never missed attending church, at least once a day on Sunday, but, unfortunately, it happened that he was called out during the service every other Sunday. This of course was not pleasant for the congregation, and the clergyman, who was a bit of a wag, was determined to prevent his congregation being disturbed. On the following Sunday when the Dr. was called, he stopped suddenly in his prayers and said, "My brethren, I must ask you to join me in prayers for the 'unfortunate' person," putting an emphasis on the word unfortunate, "that he or she may be benefited by the skill and knowledge of our brother, who has been disturbed in his devotions." This of course soon spread all over the city, and the roasting and teasing the Dr. received ended this old trick. The other gentleman resorted to a deeper dodge, and this it was: he hired a respectable looking man at $2 a day to follow his gig, and when he drove away from certain houses to rush up out of breath and ask in a hurried manner whether the Dr. was there, and on being told he had just gone, he was almost in despair and said, "my wife is taken suddenly ill, and Dr. ——is the only one can do her good," and off he would run as if to follow the Dr. This occurred so often, and only in certain streets, that the trick was soon seen through, and the badgering, the bullying and laughing at he received, put an end to any further tricks on his part. Both these gentlemen had fair practices for young men, were rising fast in their profession, and had no occasion to resort to any other than legitimate means to obtain practice, but such is the nature of man, however honest and straightforward we may be, we are all more or less tinged with "humbug."

In 1834 Dr. Thomas Walter Jones returned from Edinburgh, and settled down in Montreal, and soon got into a good practice, but during the political troubles of 1837-38, he turned his lancet into a sword, raised a troop of cavalry, called the Queen's Light Dragoons, and was in active service on the Frontier for about twelve years. The corps being disbanded in 1850, after the pelting of Lord Elgin, Dr. Jones returned to practice. He was always very fond of anatomy, and devoted much of his time to its study, and became a first-rate anatomist, and consequently an excellent surgeon. He was a colleague of the writer's in the St. Lawrence School of Medicine, and one of the Staff of the Montreal General Hospital.

It was Dr. Jones who taught the writer when he was appointed dresser to the Hospital to bleed, pull teeth, open abscesses, etc., etc. Dr. Jones died in 1864.

In 1835 Dr. Archibald Hall returned from Edinburgh and settled, as did all the other Montreal boys, in Montreal, and soon acquired a good practice. A few years afterwards he was elected one of the attending physicians of the Montreal General Hospital. He was very fond of writing, and in April, 1845, started the *British*

American Medical and Physical Journal, which he published and edited for eight or nine years. He was a very able writer and wielded a trenchant pen. In 1836, when Dr. Racey returned to Quebec, Drs. G. W. Campbell and A. Hall were appointed lecturers in the Medical Faculty of McGill College —the former taking Surgery and the latter Materia Medica; but upon the death of Dr. McCulloch he became lecturer on Midwifery, which position he held until his death, on the 14th Feb., 1868.

In 1835 Drs. Edward Quincy Sewell and Stephen Charles Sewell and the writer of this all returned from Edinburgh and established themselves in Montreal. Edward did not remain long here, and Charles became lecturer on Materia Medica in McGill; he left some years after for Toronto, completely broken down in spirit at the loss in one week of his whole family by that dreadful disease, malignant scarlet fever.

Dr. William MacNider returned in 1837. He acquired a good practice. He joined the French School on its formation, and he established the first Lying-in Hospital in Montreal; this institution became afterwards what is now the University Lying-in Hospital.

I believe there was a French Medical School established in Montreal some years previously, but it did not last long. The present French School was established in 1843 by Drs. Badgley, Tom Arnoldi, Sutherland, Munroe and Bibaud—the writer declining to accept a chair in it. This School is now known as the Medical Faculty of Victoria College for the Province of Quebec. Two of its founders, Drs. Munroe and Bibaud, have died within the last year.

Francis Badgley obtained his license to practice in 1826, and went to England and purchased a practice in Kensington, a suburb of London, and when the writer went to England in 1833 Dr. B. was in the enjoyment of a very large and lucrative practice, but about the year 1842 he had to sell it, and he returned to Montreal, where he soon obtained a name and reputation. After being here a few years he went to Toronto, but did not remain there long, but returned to England, and became a partner in the Malvern Water Establishment, but, notwithstanding the boasted virtues of this celebrated water cure, he did not prolong his life, for he died soon after going there.

William Sutherland must be remembered by the great majority of those present here to-night as he only died a few years ago. He was characterized by his eloquence and flowery language. He was modest, benevolent and unselfish. He was of unswerving integrity in every sense, of an amiable, generous disposition. His knowledge was diversified and extensive, and he was regarded by all with affectionate respect. He was the most eloquent lecturer we have ever had in Montreal, and his death, which occurred on the 9th February, 1875, created a vacuum that cannot and will not soon be filled up.

Dr. William Fraser obtained his license in 1836, and after a few years had an excellent practice. He was appointed lecturer on Medical Jurisprudence, and subsequently Professor of Institutes of Medicine in McGill, which chair he held till his death, which occurred 24th of July, 1872.

Dr. Robert L. MacDonnell left Dublin and came to Montreal in 1845. He was appointed lecturer on Institutes of Medicine in McGill and one of the Attending Physicians of the General Hospital. He was an able man and an accomplished physician. His death, which occurred the end of January, 1878, was a melancholy one. He was attending the funeral of an esteemed confrere, Dr. Hector Peltier, when he was struck by the shaft of a sleigh, and died two days afterwards of fracture at the base of the brain. He was a colleague of the writer's in the St. Lawrence School of Medicine.

Dr. Charles Smallwood had been practicing for many years in St. Martin and came to Montreal about 1860; he was a great meteorologist, and well known and liked. He died 22nd December, 1873. He was a D.C.L. of Bishop's College, and an LL.D. of McGill, and for a short time was Dean of Bishop's College Faculty of Medicine.

Dr. Wolfred Nelson resided for some years at St. Denis. He was one of the leaders in the troubles of 1837-38, and was after his capture exiled to Bermuda. When liberated he established himself in Montreal, and very soon obtained a large practice. He was mayor of the city and a member of Parliament. He was a talented man, very popular and very much esteemed. He obtained his license in 1811. In those days candidates were examined before the Chief Justice, and he has often related to the writer the following anecdote connected with his examination. Among other questions he was asked how he would treat a case of ague. He replied, "By giving arsenic." "What!" exclaimed Chief Justice Monk, "give arsenic, sir, arsenic? Arsenic is a poison, I use it to poison my rats."

Nevertheless Dr. Nelson received his license Dr. Nelson was an honorary M.D. of McGill College. He died in 1863.

There are many others whose names I might bring before you, but as I have merely alluded to the leading ones, and this paper is already so long, I have to refrain.

In 1843, the Montreal Dispensary was established, but it had to close for a couple of years owing to want of funds, but re-opened with renewed vigor, and still continues to do much good.

In the year 1845 the Medico-Chirurgical Society of this city took the initiative in trying to form a convention of the different societies of other places in Canada, and issued circulars to them, asking them to send delegates to a meeting to be held in Montreal, to which they cordially responded, and named delegates accordingly; but some gentlemen thought such action ought to originate with the profession at large, and called a public meeting in accordance with these views, and at that meeting, which was a very stormy one, a motion was carried to the effect "that the delegates from the Montreal Medical Society be not permitted to vote," consequently these delegates, with Dr. Hodder of Toronto and Dr. Marsden of Three Rivers, who had been sent to attend the meeting, retired under protest, and thus ended what might have been a useful union of all the medical societies then in existence.

In 1847 what was termed "ship ever"—maculated typhus fever—was brought in ships by the emigrants, about 33,000 having arrived that year. Sheds were opened at Point St. Charles, and thousands upon thousands were carried off by that disease, and were buried near where they died. The ground is now marked by a high rough stone monument, erected by the builders of the Victoria Bridge and the Grand Trunk Railroad.

In 1849 the Asiatic cholera again visited this country, and the Government established a "Central Board of Health," of which Dr. Wolfred Nelson was appointed president and the writer secretary.

In 1851 the "St. Lawrence School of Medicine" was opened, but it only lasted one year, although it was attended by seventeen students. It was killed by medical politics, which at that time ran very high. In the same year "The St. Patrick's Hospital" was established in connection with this school, but, after a useful existence of over twelve years, it was swallowed up by the Hotel-Dieu. In 1844 Drs. Badgley and Sutherland started a medical journal, the *Montreal Medical Gazette*. The first number was published in English and French, but the other numbers were printed all in English, this being the first entirely English Medical Journal ever published in this country. Some twenty years before this, a medical journal was published in Quebec, but it was half French and half English. In 1851 the writer, with the late Dr. Robert L. Macdonnell, published the *Canada Medical Journal*, and in 1854 Drs. Wright and McCallum published the *Medical Chronicle*. All these journals had but an ephemeral existence, actually dying from inanition, from want of proper support by the members of the profession. In 1865 Dr. G. E. Fenwick and Dr. F. W. Campbell started a new journal, giving it, by permission, the name of the journal published by the writer in 1851. This very able journal existed for ten or twelve years, when the connection of these two gentlemen with it was dissolved, owing to medical politics, and it was merged into two separate journals, which still exist, the *Canada Medical Record*, edited by Dr. F. W. Campbell, and the *Canada Medical and Surgical Journal*, edited by Drs. Geo. Ross and W. A. Molson.

I have now, gentlemen, given some of my reminiscences of many of your predecessors in the professioni n this city. As a matter of course I have not attempted to mention any who are still with us —I leave that for other and abler pens.

During the fifty-two years that have passed since I entered upon the study of medicine I have seen many changes, changes of various kinds, changes in books and journals, and in the practice of medicine and surgery. Anæsthetics, antiseptics, and bloodless operations have all had their rise and are certainly surgical triumphs. The introduction of the use of the microscope is of wonderful utility. By the operation of ovariotomy alone it is said 40,000 years of life have been gained for women. The cure of reflex epilepsy by nerve-stretching is a great advance in therapeutics. Excision of the kidney or spleen, of part of a cancerous bladder or prostate, of the rectum and of the pylorus are now common, and attended with improving results; and, lastly, the introduction of the hypodermic syringe has perhaps on the whole been the greatest of all the improvements that have been introduced.

The world has always been full of and is still full of *hypotheses* and *speculation*, full of new remedies, new instruments, and new appliances, but whether these are all really and truly improve-

ments and advancements is, in my mind, doubtful. That there are some that are is unquestionable, but the majority soon find their way to the "tomb of all the Capulets." Once in about every decade of years old things pass away : the teaching of books, of professors, of journals, are laid aside, theories and speculations ignored, doctrines taught, and claims on behalf of old remedies of the Materia Medica abandoned, giving way to advancing science and perhaps a better philosophy ; but amid all the revolutions going on in the intellectual, moral, and scientific world there is great comfort in the reflection that principles never change—they are immutable and eternal.

(Owing to the serious illness of Dr. David, the above paper was read by Dr. F. W. Campbell.)

Correspondence.

A NATIONAL VACCINE INSTITUTION.

Editor MEDICAL RECORD.

DEAR SIR,—After several years' experience as Public Vaccinator, and familiarity thus gained of the requirements of the public vaccination service to make the practice popular or general, I am satisfied that the great essentials in the lymph made use of are *purity* and *reliability*. These can, I am also convinced, be *best*, and, I might add, *only* secured by a regular service of young healthy heifers, by means of which the stock can be kept up in perpetual succession, and a vaccine famine prevented. I have found the most prejudiced were willing to allow their infants to be vaccinated when they were informed that the lymph was from heifers.

We are fortunate in possessing one of the best stocks of vaccine ever propagated anywhere, which is from a purely Canadian source.

I have used lymph from other sources, and in each case there were objectionable features in the results, with one exception, namely, that propagated by Dr. E. J. Griffin, of Fond du Lac, which gave results in every way seasonable and satisfactory, but in no respect superior, if equal, to that propagated from the Canadian source. After several years' experience in the propagation of heifer lymph, acquainted with the expense, and painstaking necessary, I am satisfied that a well equipped institution or stable is requisite for success.

I have therefore, by every means at my disposal, advocated and urged upon the Corporation of Montreal, the Local and Dominion Governments, this view, and the desirability of establishing a national vaccine institution. I have so far succeeded as to have had a sum of three hundred dollars placed in the estimates of the Treasurer of the Province of Quebec during last session for the encouragement of this enterprise.

I also succeeded in obtaining from the then Premier, Mr. Chapleau, a letter to the Hon. Minister of Agriculture for the Dominion of Canada, J. H. Pope, M.P., offering the use of ten acres of the Government farm at the Tanneries in perpetuity for the purposes of such an institution, provided the Dominion Government would build or aid in building thereon suitable buildings in which to carry on the work of animal vaccination.

In the full hope of realising the hoped-for Government aid to establish an institution for the propagation of pure animal vaccine lymph on a sound and substantial foundation, I was induced to change the name of my enterprise to that of the Canadian Vaccine Institute, and to offer lymph to municipalities, etc., within the Province of Quebec at reduced rates.

Should the profession, or any number of them, club together, in the absence of Government action, to erect suitable buildings required to conduct the business upon the Government site offered by the Provincial Government of Quebec ; or should, in the near future, the hoped-for Government aid be given, I would suggest that, on the erection of the enterprise into an institute of a national character, a Board of Directors or Visitors be appointed from among the profession to exercise a general supervision of the character and working of the institution, and to give confidence to the public that the money subsidy was being wisely expended for the furtherance of the enterprise as intended—such Committee to number *seven*, and to include a representative from each of the local medical schools, McGill, Victoria, Bishop's and Laval ; also one from the Montreal Veterinary College, Professor McEachran, and one from the general profession resident in Montreal, and one resident in Quebec. Eventually each teaching body in the Dominion might be represented on the Supervisory Committee, thus giving a truly cosmopolitan and national character to the institute.

It is too late in the day, notwithstanding the proportion of failures, to enter upon an advocacy of the desirability of animal vaccination as a source of supply for general vaccination purposes—that is admitted, more especially since the spread of

syphilis among domestic circles has become so alarming; and the numerous expressions of personal satisfaction in the use of the lymph propagated and sent out to members of the profession in the past encourage me to hope that the efforts made to secure satisfactory results and establish the confidence of the profession in the vaccine produced in the past has not been in vain; and let us hope that, with the accumulation of experience and skill, the success of the future will be even greater in every way.

W. E. BESSEY, M.D.

P.S.—I have fought this battle single-handed so far, while in the United States and elsewhere the profession are a unit on the subject, and strong combinations have engaged in the production of vaccine lymph as a commercial enterprise. Why not combine here—" Union is strength ! "

Progress of Medical Science.

NOTES OF ONE HUNDRED AND THIRTEEN CASES OF OPERATION FOR LACERATION OF THE CERVIX.

By William Goodell, M.D., Philadelphia, Pa.

I have had one hundred and thirteen cases of operation for laceration of the cervix, and without a death. Of these ninety-nine were bilateral lacerations. Three were on the right side alone; eight were on the left, and three were markedly stellate, involving three sides or more. The reason why these operations show such a preponderance of bilateral laceration is simply this: In my experience, when one side alone is torn, the sound side acts so like a splint that the lips of the fissure are not liable to spread apart and cause ectropion to a pathological degree. They, therefore, as a rule, do not need an operation. Of these cases union wholly failed in two. In four the union was partial; but in two of these, a suspicious-looking cervical growth had been previously removed. It, however, was not malignant, for in each a subsequent operation proved perfectly successful.

The number of cases in which the forceps were used I have not noted; but I have generally found that when the tear was an unusually bad one, the perineum was also torn, and that the labors had been instrumental. In six of these cases both perineum and cervix had to be operated on. In three of these both lesions were operated on at one sitting. All were successful.

Of my one hundred and thirteen cases, thirty-five were performed in the amphitheatre or the private operating rooms of the Hospital of the University of Pennsylvania—which is a general hospital. Of these, two had serious attacks of perimetritis and of parametritis, and two had lighter attacks, all due to hospitalism. They recovered, but in one the convalescence was delayed by the formation of two abscesses in the leg. In this case, the patient next to her broke out with erysipelas on the day of the operation. In the other bad case, an explosion of erysipelas took place on her face and trunk. Strange as it may seem, the union in all these cases was perfect. I attribute this success to the fact that the stitches were not removed on the outbreak of the pelvic inflammation, but were allowed to remain a much longer time than usual. As the carbolated spray obscures vision in such operations, it was not resorted to in any of these cases. The only antiseptic means employed being a 2.5 per cent. solution of carbolic acid for the sponges, and vaginal injections of the same solution repeated twice a day until the stitches were removed. The same means were used in my seventy-eight private cases, and of those I had but two with any symptoms of inflammation. The attack was in each case mild and manageable, giving me no anxiety whatever.

Of all my cases I had but one of secondary hemorrhage—my forty-first case. It was checked by a vaginal injection of a saturated solution of alum. This immunity I attribute to my rule of passing in the stitches very deeply. Hemorrhage, during the operation, has often been free and troublesome, but I have never ventured to check it by astringents. The plan which I have long adopted is to pass a wire under the bleeding vessels, and make traction on the ends while the denudation is carried on. This wire is afterwards utilized as a suture.

Many of my cases of bilateral laceration, but not all, had become sterile after the receipt of the injury; but the exact number has not been accurately recorded in my notes. Of those whose track I could keep after the restoration of the cervix, four very shortly afterwards became pregnant. In three of these the laceration was not reproduced: in one a tear occurred on the left side, but not of sufficient extent to warrant an operation.

In my opinion the cervix should always be restored whenever ectropion of the mucosa takes place, and whenever the glands of Naboth become enlarged. Indeed, the visible presence of those glands around the os externum is a very good proof of cervical laceration. But it is not an infallible one, for I have met with them in virgins and in multiparæ with hemorrhagic tendencies from fungous vegetations. These glands often honeycomb the line of denudation, and I make it a rule, whenever it is feasible, to dissect them out. In one of my patients, whose mind hovered over that ill-defined border-land between hysteria and insanity, the cervix was literally riddled with these glands. They lay so close together and were so

much enlarged as to look like the seeds in a pomegranate. I could not dissect them all out, because too much tissue would have been removed, and yet the union of the parts was excellent. The operation cured her of an obstinate irritability of the bladder, but her brain was not much improved.

Another indication for the operation is a hereditary tendency to malignant disease. There is no question in my mind that a cancer of this cervix starts from the constantly fretted and chafed raw surface of a laceration. One would infer this from an *a priori* reasoning; but it is further substantiated by the fact that this disease very rarely indeed attacks a virgin or a sterile woman. On the other hand, the more children a woman has given birth to the greater her liability to cancer. Then again the fissure of an old rent is very often found in a cervix attacked by malignant disease. Acting upon this belief I have operated upon torn cervices without local or constitutional symptoms, for no other reason than that there was a history of cancer in the family.

A third indication for the repair of the cervix is the existence of stubborn and sub-acute peri-uterine inflammations. I make this statement with some degree of diffidence, for it is contrary to the teachings of our very best gynæcologists, and especially so to those of Dr. Emmet, to whom we owe the largest measure of thanks for devising this ingenious and most valuable operation. Every one of us has seen cases of bad cervical laceration, complicated with tender and thickened broad-ligaments, or with more or less fixation of the womb —cases which refuse to yield to treatment. Usually each menstrual period rekindles the dying embers of the inflammation, and these monthly exacerbations undo the good gained by the inter-menstrual treatment. In these cases there is plainly a relation of cause and effect between the lower lesion of the cervix and the upper pelvic lesions. The cervical wound produced in the first place the phlegmon of the broad-ligament, and the monthly over-engorgement of the wound, caused by the afflux of blood to the cervical sore, brings about a pathological turgescence of the vascular appendages of the womb. Hence the persistence of the ovaritis or of the peri-uterine inflammations. Cure now the chafed and angry cervical sore—the *fons et origo mali*—and you lessen the monthly afflux of blood, and consequently the monthly exacerbations of the upper pelvic lesions. Acting upon this idea, I have, on several occasions and under such circumstances, performed the operation, and thus far I have had every reason to congratulate myself for taking this responsible step. Another occasional indication for the operation is the presence of dense cicatricial tissue in the angles of the fissure, always provided that various pelvic neuralgiæ and distant nerve perturbations can be satisfactorily traced to the cervical injury. Sometimes this can be proved by the tenderness of the cicatrix—coitus or the pressure of the sound on some point eliciting radiating pains. Oftener the relation must be inferred, either from the monthly exacerbations or from the exclusion of other causes. The diagnosis is not always easy, and I am sure that I have here made mistakes—that is I have removed wedges of cicatricial tissue without restoring by that means my patient to health. From my observations I am disposed, indeed, to believe that the painful influence on the system of hard and gristly cicatricial tissue left after some cervical tears, has been overrated. I am willing to concede that sterility is sometimes owing to it, as it clearly was in one of my patients who became pregnant immediately after the operation. I am also ready to grant that reflex pains and visceral disorders may come from it. But I am inclined to look upon these results as exceptional, and that a tear of the cervix is too often made the scape-goat of headaches, and nape aches, of spine aches and back aches, and of various other nervous explosions which are due to nervous exhaustion or to nutritive changes in nerve-centres, rather than to traumatic injury of their extremities. In other words the constitutional phenomena are dependent usually on fine central lesions, and not on the reflex influence of coarse peripheral injuries. My experience would lead me to say further, that while a woman suckling her infant, and menstruation is thus kept away, she may not appreciate the evil effects of even a bad laceration. But as soon as she gives up suckling and the monthly congestions begin, new exacting local and constitutional symptoms soon set in.

Of the beneficial results of the operation of trachelorraphy, I must candidly admit that I am not now so sanguine as at first. Cases have disappointed me, but then, on the other hand, I have undoubtedly operated on some cases unnecessarily. The broad rule may be laid down that, where marked ectropion exists, associated with enlarged Nabothian glands with leucorrhœa and menorrhagia, the issue of the operation will be a happy one. In such cases I have had capital results. The most costly present ever received by me from a patient came from a lady who had been an invalid for eleven years, but who was restored by this operation to health and to society. Dr. E. L. Duer aided me on the occasion, and will be able to corroborate my statement. When, however, I have operated on a tear without ectropion, or merely on account of cicatricial tissue in the angles of the fissure, I have met with some bitter disappointments. But I now know better when to operate, and this fact I have learned, that nervous exhaustion and spinal irritation will evoke symptoms which others as well as myself have referred to slight cervical tears, but which were in no wise dependent on these lesions.

My mode of operating is first to coaptate the parts by tenacula, and to determine with the sound the proper site for the new os externum. At the very centre of this site the two lips of the fissure are transfixed by a powerful needle armed with a stout silver wire about two feet long. The ends of this wire being twisted

together form a long loop which puts the womb under perfect control. By it the womb is gently drawn down and put within operative reach. By hooking up with a tenaculum that portion of the wire running across the fissure, viz., its middle, the loop is doubled at the expense of its length, and by separating the two loops the lips of the fissure are drawn apart. The denudation I now prefer to make with a knife, trying always to remove all the cicatricial tissue, and in one piece if possible. After the denudation, the wire is again converted into a single loop, by releasing its middle portion and drawing it back. This brings the lips together with mathematical precision, and shows whether any further trimming is needed. I always shot my sutures, and very generally shot also the guiding or piloting suture. To facilitate the drawing down of the cervix and the removal of the stitches, I leave uncut the ends of this wire and those of the highest suture on either side. I try, of course, to operate at a time when the catamenia will not be reproduced or be accelerated. But in spite of this caution I have often had the menstrual flow to occur a very few days after the operation; yet in not a single instance has such a misadventure interfered with the prompt and perfect union of the parts. On several occasions I have, at the same operation, curetted the womb for those vegetations which are so likely to be found on the endometrium in cases of old cervical tears. But while this is a great saving of pain and of time to the woman, and has thus far not been followed by bad results, I deem it too unsafe a practice to be generally resorted to.—*Medical Gazette.*

THE TREATMENT OF DIABETES.

Whether diabetes be itself a disease, or a disturbance arising in the course of various diseases, whether prominent in acute illness, or one among the obscure symptoms of chronic ailments, and whatever its origin may be, the conditions to be observed in its management are invariably the same;—the first essential of successful treatment is a carefully restricted diet.

During the temporary glycosuria of some febrile states, the use of starchy and saccharine foods and diluents, such as arrowroot, corn-flour, cocoa, barley-water and gruel, is to be avoided; milk is only to be used sparingly, cream is better; glycerine should replace sugar in cookery and in sweetening tea and coffee. Lemonade is best made with lemon-juice, glycerine and cold water; in this white of egg may well be diffused. A little toast may be allowed, with plenty of butter, eggs, and beef-tea. The conscious subject of diabetes mostly adopts this method of nursing the more trifling ailments resulting from cold or fatigue; beef-tea is habitually substituted for gruel; limes and lemons are known as almost the only fruits free from sugar. Alcoholic stimulants would generally afford grateful help, but no wine can be quite palatable without sugar; no brandy is good without liqueur. Holland's unsweetened gin, and some, but not all, kinds of whisky are fit adjuncts to the diabetic dietary. When glycosuria is first detected during an attack of severe illness, it may be difficult to say how far diabetes is an accidental complication or an underlying condition, and impossible to estimate the originating causes at work; hence may arise a caution as to prognosis, but there is no place for hesitation as to treatment. Mostly in grave disease, as of lung or kidney, the diabetic condition has been foreknown, perhaps guarded against by a partial avoidance of starchy and saccharine food; in these cases, restrictions, which had been gradually relaxed as one or another slight departure from a rigid dietary had been found possible, have now to be reinforced. Where there condition has not been suspected, the patient will depend upon its early recognition and prompt treatment. The good effects of a rigid dietary have to be waited for with more patience in presence of a confirmed diathesis than where glycosuria may be dependant on a less persistent cause; but in either case steady perseverance in the same line of treatment is required, however different may be the primary causes.

Very variable is the power recovered by diabetic patients, of assimilating some articles of diet at certain times which at others would surely lead to a marked increase of their infirmity. Some can indulge in forbidden fruits with impunity, or occasionally a doubtful vegetable. Many can take milk fairly well, or need not entirely abstain from it. Sugar must always be excluded from stewed fruits and from every kind of drink. A lump of sugar weighing two drachms, taken inadvertently in a cup of tea, has determined a secretion of six times that weight of glucose in the next twenty-four hours, and made rigorous care for some days needful to overcome the wrong tendency. There are times when all soluble ingesta should be tried for sugar by Fehling's test, and the bread and sauces with iodine. Starch will be found in some of the prepared flours said to be freed from it, or partly converted into dextrin. Gluten bread should habitually form part of the dietary; the rusks made by Bonthron are agreeable, either dry or toasted with butter. Under careless diet a feeling of weakness, loss of flesh, irritability of manner, or some neuralgic pain, indicate an increase of sugar in the urine, which chemical examination confirms. Here a restricted diet has restored within one week, 5 lbs. of weight to the body, or removed neuralgic pains in two days. A patient under slightly modified diet, had severe neuralgic pains across both thighs after the fatigue of a journey to London; this ceased shortly after all starch, milk and sugar had been avoided.

Among the remedial agents recommended in diabetes, salicylate of soda has been used with success in the symmetrical neuralgia of this state; the remedy had no effect on the diabetes itself in several cases under my own observation. In one

of these cases, the utter uselessness of the Bethesda water was fully demonstrated three years ago; this proof of its inefficiency did not deter my patient from undertaking a journey to America to try its worth at the source, but with no favorable result. The water itself is not much more then a common table-water, a little too hard for ordinary use, but harmless and inert in moderate amount. In large quantities it is injurious, in the same way that a large quantity of any fluid is injurious in diabetes; with the further danger, not imaginary, but confirmed by distressing experience, that misplaced confidence in a futile resort leads to neglect of ordinary precautions, and so to danger and to death.

Of the good to be obtained from codeia and from extract of opium, in certain conditions attendant upon diabetes, my experience is amply confirmatory half a grain of either is given with advantage in a pill, or a solution of codeia with dilute hydrochloric acid after meals. The improvemeut secured by their aid is not merely temporary, nor is it obtained at the cost of any decline of vital power, rather by a conservation of the nervous energy most readily exhausted in diabetes. Once where complete recovery resulted, after three and a half ounces of sugar were excreted daily, codeia in full doses was one of the means employed.

The author of an able article on diabetes, in the last number of the *Practitioner*, is biased by a supposed analogy between the therapeutics of diabetes and of phthisis; the analogy is slight, so that the small dose of pilocarpin recommended for moistening the mouth in diabetes seems well worthy of trial in the manner directed. Moisture is restored to the skin by giving two or three grains of carbolic acid in an ounce of water three or four times a day for short periods; a solution of this strength, sprayed into the mouth and swallowed, relieves dryness of the tongue and throat; this solution of carbolic acid should always be administered during an intercurrent abscess or boil for two days before any incision is practiced in diabetic subjects.

Our ability to excite the secreting glands, except by the simplest aperients, is very limited; nor in the treatment of diabetes is this to be regetted, for the kidneys act too much, and there is no marked diminution in the activity of the other secreting organs of the body; the skin may be dry, but perspiration is not uncommon; the peptic glands act freely, for the appetite is large; the liver may be at fault, but is not inactive; many men diabetic for years are not therefore childless. The activity of the kidneys is directly excited by the presence of sugar; these organs, healthy at first, by degrees suffer from the overwork forced on them.

The two forms of albuminuria met with in diabetes are, perhaps, more readily distinguishable than when uncomplicated in this way. In contracting kidney, associated with gouty glycosuria, the quantity both of albumen and of sugar is small, and the urine is of comparatively low specific gravity; the conditions have gone on together, the diabetes being the less prominent, and not the primary one. The other form of albuminuria, with parenchymatous nephritis, appears in the course of typical diabetes; it comes on when the urine has been for some time in large quantity and of high specific gravity, and may co-exist with an excess of urea and uric acid. The first of these two conditions only is that in which a milk is to be recommended, or is even allowable; in the second the use of milk must sometimes be at once prohibited. Grave anxiety, caused by the persistence of both sugar and albumen in the urine after many of the restrictions in diet known to be requisite have been put in force, has been relieved shortly after the use of milk has been entirely stopped and cream exclusively used as a substitute. As the sugar diminishes, the albumen disappears and the quantity of urea increases.

In the course of diabetes sugar may completely disappear from the urine in some unfavorable contingencies. It is not rarely absent for considerable periods during convalescence; at these times the diet may be varied to almost any extent, and milk need not be excluded. Such disappearance of the sugar must not be considered as cure of the diabetes; let any shock or fatigue shake the precarious balance of health, and return to the more strict rules of dietary becomes again necessary. Milk must be again prohibited for a time because of the large quantity of sugar contained in the whey; very little of this remains in the cream, and least in Devonshire cream; cheese and curd are nearly free from it: butter is entirely unobjectionable. If skim milk is to be recomended in diabetes, why not whey? It is free from curd as well as from cream, while both contain all the sugar of milk. Indeed, it is not surprising that sugar has been recommended in diabetes:—could it be given not only on homœopathic principles but strictly in homœopathic doses, so that all the sugar ingested could be reduced to some minute fraction of a grain a day, improvement would soon be evident.

Curd should be more utilized in the diabetic diet. Cheese cakes made with it vary the fare that so much needs variation. The variety of supply for the more substantial dishes is ample; but for the lighter additions to a meal, that make eating less a duty than a pleasure, there is always room for some new combination. An agreeable cheese-cake, baked in remakin papers instead of in pastry, can be made, with or without gluten bread and curd, in the following way:—Grate one ounce of bread with the rind of two lemons, and mix with half an ounce of glycerine; with this whisk up the whites of three eggs, two ounces of cream, and one ounce of fresh butter melted by heat; add also the juice of the two lemons, and the yoke of the three eggs, well beaten; mix altogether, and bake in remakin cups for about twenty minutes, in a rather quick oven. A little more glycerine, or a little less lemon juice, will modify the flavor and consis-

tence of this confection; it is to be eaten when cold.

The management of diabetes, besides attention to diet, requires moderation in exercise, very complete intervals of repose, plenty of fresh air and avoidance of any excess in mental or bodily exertion. To control the exacerbations of the disease, absolute rest as well as rigid diet must be enjoined. At these time, for days together, the quantity of sugar excreted exceeds the amount to be derived from the starchy and saccharine food taken; a considerable amount of it must, therefore, come from amyloid material, and from waste products within the body. The protean compounds may be represented by sugar and ammonia, and their rapid disintegration may give rise to both products; with a less degree of disturbance this change would be less, some of the ammonia would be converted into urea and excreted as such, while less sugar would be formed. Rest and diet without medicine, in the course of diabetes mellitus, has gradually brought about a great diminution in the quantity of urine, a complete absence from it of sugar, with great proportional increase in the urea; and this favorable change has continued for weeks and months with but rare re-appearance of the sugar though fruit, wine, milk, and ordinary bread, the greatest luxury to a diabetic convalescent, have been allowed.—William Squire, M.D., F.R.C.P., in the *Practitioner*.

PERICARDITIS.

By Austin Flint, M.D.

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Here we have a case of rheumatic peri and endocarditis, occurring a few days after the commencement of a rheumatic affection. The rheumatic affection not presenting symptoms of sufficient intensity to be called acute, affecting only one or at most two joints, and apparently readily, and directly controlled by salicylate of soda. It occurs here to still more strongly impress upon your minds the importance of giving alkalies. Had this patient taken at the outset alkalies in sufficient quantity to render the urine alkaline, I think it is fair to say that the probability is he would not have these murmurs. I will not say positively that he would not have had them, for the opinion of Mr. Fuller (who wrote many years ago) that rheumatic pericarditis never occurred as long as the urine was kept alkaline, was too strongly stated; we may say, however, that the liability to pericarditis is much diminished as long as the urine is kept alkaline. And here is another point which renders this case very instructive, namely, that while the salicylate of soda controlled the rheumatic affection, it did not prevent the affection of the heart, and since that remedy, salicylate of soda, has come into use, and has led, as it often has done, to the disuse of alkalies, cardiac affections have become much more common than before. I know, from personal observation, that we meet now with cardiac affections in rheumatism more frequently than we did when the alkaline treatment was relied upon, and the object of chief importance in the treatment of rheumatism is prevention of the cardiac affection, although it is, of course, desirable, if possible, to cut short the affection of the joints. But there is no such important consideration pertaining to the joint affection as there is to cardiac complications. Therefore, while it is perfectly proper, and indeed very important, to control the rheumatic affection by these remedies, we should not discontinue the use of the alkalies which reduce the liability to an affection of the heart. These points are so well illustrated in this case that I hope they will be borne in mind.

The pericarditis in this case is devoid of any apparent symptoms of gravity. It is one of those diseases which vary very much in different cases, as regards pain and other distressing symptoms and symptoms of gravity. This patient is in bed, but had he been allowed his own will he would have walked up to the amphitheatre. It is not proper for a patient with some pericardial effusion to take considerable exercise. That is an important practical point. He should take rest. I have known of at least two instances of sudden death, arising, apparently, from imprudent exercise during the presence of pericardial effusion.

Pain is sometimes exceedingly severe, having all the characteristics of pleuritic pains, and hence, when physicians relied wholly upon symptoms in diagnosis, cases of pericarditis were sometimes confounded with pleurisy. The pain is lancinating, sharp, of course, situated within the præcordium, and is increased on inspiration. In other cases there is little, if any, pain at all; not sufficient to call attention to the existence of any inflammatory symptoms at the pericardium. That is true, also, of other serious inflammations, as, for instance, acute pleurisy. Cases differ also with respect to the amount of the effusion; sometimes it is slight and inappreciable, in which event we distinguish the case as one of dry pericarditis. In other cases the effusion is moderate in quantity, in others considerable. In proportion to the amount of the effusion we have other symptoms dependent upon the effects of this, first upon the heart, and then upon adjacent organs. Of course, in proportion to the amount of the effusion the heart is compressed. It labors under mechanical disadvantages, hence, frequency or smallness of the pulse; hence, disturbance of respiration. Then, pressure by the enlarged pericardial sac upon adjacent organs sometimes occasions inconvenience. It presses upon the lung, and diminishes somewhat the lung capacity; it may press upon the œsophagus, and thus interfere with deglutition.

In the vast majority of instances in which we meet with pericarditis, it occurs in connection with one of three affections, namely: first, and most frequently, rheumatism—rheumatic pericar-

ditis; next, perhaps, chronic Bright's disease; next, in connection with either pleurisy or pneumonia, affecting the left side. It is in these three pathological connections that we most frequently meet with pericarditis. The instances in which it occurs otherwise, including, of course, traumatic cases, are very few. It is very apt to be overlooked in connection with pleurisy and pneumonia, because we diagnose the presence of those diseases and think we have enough to account for the symptoms, and perhaps, omit to examine with reference to pericarditis.

As to the physical signs, I need not, I suppose, dwell upon the friction murmur. That is evidence of pericarditis, and also of pleurisy in the first stage. It is not, however, always found, even in the first stages of pleurisy, whereas in pericarditis I think I am safe in saying it is always present before much effusion has taken place. The movements of the two serous surfaces upon each other are such as to give rise to a murmur if the conditions for it be present, namely, a fibrinous exudation.

In order to be able at once to recognize the murmur, we must bear its characters in mind. Let us repeat them. In the first place, the friction murmur is almost invariably double; this is, it accompanies the two sounds of the heart, although it has not a fixed and uniform relation to them. They are, so to speak, in discord with the sounds of the heart, but there are two for each revolution. They convey to the mind the idea of friction. This in itself should not be relied upon in the diagnosis, for endocardial murmurs sometimes have that character. They seem to come from a superficial situation, right under the ear, or under the surface. They are increased in intensity when pressure is made over the præcordia with the ear or stethoscope. They are not conducted beyond the præcordia much, if at all, and are frequently heard only within a certain portion of the præcordia. These are characteristics of the pericardial friction murmur, as contrasted with an endocardial murmur. Endocardial murmurs, in order to be confounded with a pericardial friction murmur must be double, since the pericardial murmur is double, and the only instance in which this error can be committed holds with relation to the aortic direct and the aortic regurgitant murmurs. The diagnosis can be made in that case by paying attention to the qualities of the endocardial murmurs, the conduction of the aortic direct up into the great vessels, etc.

After the effusion has been poured out into the pericardial sac, as in this case at present, the murmur disappears, and if we see the case for the first time at this stage, we have to depend upon other signs for diagnosis. Removal of the heart from contact with the thoracic wall, by the presence of fluid in its investing membrane, alters the first sound, diminishes its intensity, and divests it of its booming quality. It becomes valvular, in that respect being like the second sound, and frequently being more feeble. This change is a very striking one, and was illustrated in the following case. Some years ago, when again about to commence my visiting service in the wards of the hospital, and while passing through, one of the assistants said, regarding a certain patient, that it was a case of rheumatism, a light attack; but, as a matter of curiosity, more than anything else, I put the stethoscope over his heart, and at once recognized the fact that the first sound was like the second, being valvular in quality. A further examination proved the presence of pericarditis with effusion, which had entirely escaped attention, because there was no pain or other symptoms pointing to it.

If the apex beat be above the normal position it is a diagnostic point in favor of pericarditis with effusion. Sometimes it can only be felt by requiring the patient to lean forward, so that the apex may come in contact with the thoracic parietes. In this patient, the apex beat is in the fourth intercostal space, instead of in the fifth, which is indicative of some of the effusion still remaining within the pericardium. The presence of the effusion is further determined by percussion and auscultation, the former showing an increased area of dulness, and the latter an increased area over which there is absence of respiratory murmur. Increased area of dulness in the præcordial region, caused by pericardial effusion, is diagnosed from that caused by enlargement of the heart in this manner. In the latter the increased area of dulness extends more downward and to the left, while in the former the area of dulness is increased laterally, nearly equally on the two sides, and upward, and the triangular form of the area of dulness, corresponding with the form of the pericardium, is evident on percussion and auscultation. The apex beat, instead of being lowered, as in enlargement of the heart, is higher up than normal, in effusion into the pericardium.

The treatment of pericarditis varies considerably according to the amount of the effusion and the intensity of the inflammation, as denoted by the general and local symptoms. I have already spoken of the importance of quiet, which is an essential point in the treatment. If the patient suffer from a considerable amount of effusion, it is proper to treat it as we would effusion into the pleura, viz: we may give hydragogues; but always remember that this must not be carried to the extent of producing any considerable general debility. We may give diuretics. Sometimes blisters over the præcordia have a beneficial effect. I do not know that we can explain how it is done, but facts show the vesication of the skin lying over serous membranes aids in producing absorption of the contained effusion. I suppose a certain amount of benefit pertains to the application of the tincture of iodine externally. The patient, of course, is to be sustained by measures which do not excite the action of the heart, but which improve the constitutional power. If pain be a

prominent symptom, of course that is to be relieved by the judicious use of opium in some form. We should continue the use of alkalies, and in that way, perhaps, keep the inflammation from increasing. A less quantity of the alkalies will be required to continue the urine alkaline than was required to produce alkalinity in the first place. These are the more salient points in the treatment of this affection.

Rheumatic pericarditis gives us a good ratio of recoveries. The prognosis, if there be no untoward circumstances, is favorable. Renal pericarditis, if we may so distinguish it, is quite otherwise. A very large majority of these cases prove fatal. Pericarditis occurring in connection with pleurisy and pneumonia, increases very much the gravity of those affections, and proves fatal in a considerable proportion of cases, although its presence does not warrant us in forming a fatal prognosis.

In the present case it is only important to keep the urine alkaline, and to prevent the patient from making those exertions which he seems inclined to do, because he feels pretty well and has no local symtoms. — *Phil. Medical and Surgical Reporter.*

RECTAL ALIMENTATION.

Dr. W. Joseph Tyson, F.R.C.S., Folkestone, in a paper on this subject in British *Medical Journal* says :

Before going on to speak of these cases which require rectal feeding, the preparations of food which have been, and those which are used at present, it will be well to say something about the anatomy of the rectum, the theory of absorption, as well as the best mode of administering an enema.

1. *Anatomically*, the rectum is not ill-suited for the purpose of feeding. It is extremely well supplied with blood-vessels, which have a most free anastomosis ; in fact, its mucous membrane is thicker, and more vascular than that of any other part of the large intestine. Lymphatics of a large size are found here ; and Mr. Wadham, late physiological assistant at St. George's Hospital, tells me that he has found several small solitary glands in this part of the bowel. Toward the anus, the secretory apparatus gradually disappears. At the lower part of the rectum, about an inch from the anus, there is a dilatation of the bowel—this dilatation being of considerable use for the lodgment of food ; and, lastly, the anus itself, although it fails in its duty in some cases, yet in very many other acts effectually as a sphincter, much in the same way as the sphincter at the cardiac or the pyloric end of the stomach.

2. With respect to *absorption*, it has been said that substances known as colloids, such as albumen, gelatin, starch, etc., can not pass into the system until they are converted into crystalloids ; and as this change has been supposed not to take place in the rectum, the giving of enemata containing colloids, such as beef tea, eggs, etc., has little or no nourising effect upon the body ; and the brandy which is frequently added, only tends more to increase the colloid properties of the aforementioned foods, and therefore to render still more nugatory the use of these enemata. Graham supposes the coats of the stomach to dialyze the food during digestion, absorbing the crystalloids and rejecting the colloids—an action favored by the thick coating of mucus which generally lines the stomach ; but Miller, after having quoted the above paragraph, goes on to say that "this suggestion probably requires some limitation—otherwise starch, gelatine and other colloids, unless previously converted into crystalloids, would be wholly unabsorbed after they had been swallowed." The starch, as far as the stomach is concerned, is converted into crystalloid by the saliva ; and the starch which escapes being made dialyzable in the mouth is made so in the duodenum by the action of the pancreatic juice. This is the reason, probably, why sugar has been recommended to be added to nutrient enemata. Whether the rectum has the power of changing colloids into crystalloids, is perhaps doubtful ; but results which have and do now follow the use of alimentation by the bowel, are too evident to leave any doubt that the rectum possesses properties by which nutrient injections, if not wholly absorbed, are certainly partially so.

It has been suggested that the secreted intestinal juices which descend from above may dissolve a considerable amount of starch and animal fiber ; and lately a theory has been put forward, that the contents of an enema are carried from the rectum to the upper intestinal tract, where digestion and absorption actively takes place ; but as digested meals can now be given to the rectum to a great extent, there will be little need for the rectum, as well as perhaps other portions of the bowel, to act the part of a stomach.

3. *The operation of administering an enema* requires to be carefully and skilfully done. Any one who has given these injections by means of the ordinary ball-syringe, must have felt the inconvenience of this, the usual mode of procedure. If the ball be not quite full, air will probably be injected into the rectum, to the annoyance of the patient ; and, even when the ball is full, great care must be exercised not to spill any of its contents on the bed. The best mode is to take a piece of india-rubber tubing, two or three foot long. At one extremity fix a small piece of bone, resembling that which is attached to an ordinary Higginson's syringe ; to the other end of the tubing attach to funnel. When the injection is to be used, the patient is placed on his side, the bone extremity of the apparatus oiled, and placed into the bowel, the other end raised, and the prepared enema is now poured into the funnel, and runs easily and comfortably into the rectum ; the rate of progress can be increased or diminished according as the funnel is raised or lowered, or the food can be arrested at any time altogether by just nipping the tube

below the funnel by the fingers of the hand holding it.* If this apparatus be not at hand, a Higginson's syringe is the next best thing. I need hardly say that the rectum should be empty when a nutrient injection is to be given.

4. *In what cases should recourse be had to rectal feeding?* I would recommend it in all cases where obstinate and constant vomiting has existed for four days, or even before; of course, if the cause be a removable one this should be attended to at once. Then there are a large number of cases in which rectal alimentation might be used beneficially as a means of treatment or even cure; such as painful diseases of the stomach, including gastric ulcer, cancer, dilatation, or, again, in some affections of the bowels.

Composition of Nutrient Enemata. Hot water can scarcely be regarded as a food; yet in some cases of collapse, the injection of it, about the temperature of the blood, might very reasonably be given. In many conditions of partial stoppage of the circulation, an addition to the volume of the blood has been successful, at least temporarily, in re-establishing the action of the heart.

Nutrient enemata have been in the past, and are often now, made with beef tea, milk, the yoke of an egge and a little brandy, either separately or combined; in bulk not exceeding three ounces, and given every two, four, or six hours, according to the exigencies of the case. Although the above have done good, their value has been enhanced since the introduction of artificial digestives. Pepsin, in its various forms and hydrochloric acid were long used in stomach digestion, before their value was recognized in rectal alimentation. Pepsin is now very much replaced by the preparations of pancreatine, the latter possessing the double power of acting on proteids as well as on starch. The two ferments which have the property of changing the proteids into peptones, and the starch into sugar, are called respectively proteolytic and diastatic; and, on account of this double property of pancreas, the preparations of the latter have come very much into vogue.

Two preparations of pancreas for rectal use have been made—one by Dr. Leube, and the other by Dr. Horace Dobell. In the former one part of finely minced pancreas is mixed with three parts of scraped meat, adding warm water sufficient to make a small injection, and sometimes a slight proportion of fat. Dr. Leube found by experiments on dogs that a considerable amount of nitrogen was thus consumed by the body. In the second preparation, a fourth of a pound of cooked beef or mutton is finely grated, to which are added twenty grains of pancreatic powder, and twenty pepsin (pig's); the whole is mixed in a warm mortar quickly, and one tablespoonful of brandy, and enough warm water to bring the mixture to the consistency of treacle, are added; this is injected as quickly as possible after the mixture has been made.

I think that the best pancreatic preparation, and certainly the one most easily tried, is that known as liquor pancreaticus (Benger), strongly recommended by Dr. W. Roberts, of Manchester, in his Lumlean Lectures of 1880, "On the Digestive Ferments and the Preparations and Use of Artificially Digested Food." Speaking of the giving of food by the rectum, Dr. Roberts says, "The enema may be prepared, in the usual way with milk gruel and beef tea, and a dessert spoonful of liquor pancreaticus should be added just before administration. In the warm temperature of the bowel, the ferments find a favorable medium for their action on the nutritive materials with which they are mixed, and there is no acid secretion to interfere with the completion of the digestive process." Thus, in one thing the rectum possesses an advantage in the use of this preparation over the stomach, in the absence of any acid to interfere with the full action of the pancreatic ferments. In giving these enemata they should be made of milk, or milk with beef tea or of milk gruel. To a half pint of the warm, enema, a tablespoonful of liquor pancreaticus and half a teaspoonful of bicarbonate of soda should be added. About three ounces of this mixture should be injected every two, four or six hours, as the case requires.

Enemata of blood have been recommended, and in some cases successfully tried. They were first suggested by Dr. Andrew H. Smith, of New York; he found that, when blood was administered *per rectum*, both corpuscles and serum were absorbed. Three or four ounces of defibrinated blood having been injected into the rectum at night, no trace was found in the evacuations the next morning. Ox's blood has generally been employed. It must be fresh and defibrinated before use, and two or three ounces may be injected every two or three hours; but if there be any stomach-digestion going on, it may less frequently used. In order that there may be no delay in its use, it can be obtained already prepared, concentrated and preserved in tins. To prepare the injection the concentrated blood is dropped into the warm fluid to make the enema, a fluid dram representing the fluid ounce of ordinary blood. The cases treated have been recorded by Dr. Smith, Dr. Hanks, and Dr. F. W. Brown in America, and Dr. A. Ernest Sansom in this country; they have been those of gastric ulcer, severe uterine hemorrhage, diphtheritic paralysis in a child, pulmonary phthisis, anemia, and a few others. The success so far attending this novel mode of treatment is certainly sufficient to encourage an extended trial.

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*To prevent air from entering the rectum, the tubing can be "clipped," either by a spring of the fingers, close to the bone extremity, while the food is being poured into the funnel.

TREATMENT OF VOMITING BY ABSTINENCE FROM FOOD AND MEDICINE.

Sometimes vomiting is a very troublesome complication in disease of other organs than the stomach. In Bright's disease, in various functional as well as organic nervous disorders, in uterine affections, in cardiac and lung diseases, the physician is at times annoyed or becomes anxious as to the result on account of the obstinate vomiting; the derangement of the stomach becomes more important than the original disease. Effervescing drinks, oxalate of cerium, creosote, small doses of ipecac, hydrocyanic acid or tincture of nux vomica, bismuth, and various other remedies do not give relief, but seem rather to aggravate the symptom by exciting the vomiting afresh.

It is not necessary to inquire now why vomiting is thus persistent; there seems from some cause to be an irritability of the nerve centres, such that the presence of anything, even water, in the stomach serves to excite the reflex act of vomiting, and the more frequently this happens the more is the irritability of these centres increased. This condition may be due to disease, primarily or secondarily, or it may be produced by unwise medication.

Often the best method of treating this complication is to give the stomach rest. Sometimes only a large amount of food taken at one time excites vomiting; then it is sufficient to resort to frequent feeding, giving a very small quantity each time, a mouthful, or a spoonful every fifteen to thirty minutes; thus the stomach never contains a large mass of food requiring considerable muscular exertion to roll it about and by its weight or bulk exciting the reflex irritability of the nerve centres. Many times, however, this is not enough, the stomach requires more complete rest, and the best treatment is to withhold all food and medicine; sometimes a few hours rest is enough, again it requires two or three days, as in one of the following cases: then it will be necessary to use nutrient enemata.

When there has been much vomiting thirst may be very annoying to the patient; small lumps of ice held in the mouth will relieve this, and generally do not cause vomiting. After the stomach has had sufficient rest it is best to commence feeding by the mouth with caution, giving a little frequently. Milk and lime water, equal parts, a teaspoonful every half hour, should be first tried; if well borne the amount can be increased gradually. It is a mistake to increase the quantity too rapidly. Some patients do better on soup, or Mellen's or Ridge's food, or on scraped raw beef. The following cases are a few from many which might be reported:

Bella L., aged twenty-two, transferred to nervous and renal service from medical service Aug. 25th. About one year previous was out in hot sun for a long time, and next day did the week's washing; during these two days had headache, nausea, vomiting, and vomiting with dizziness; was confined to bed one day. Soon after had pain and weakness in both iliac regions, which increased in severity till Christmas. She seemed to be suffering from general nervous weakness, there being no organic lesion. She had slight nausea at times, with dyspeptic symptoms till September 12th; there was so much nausea and vomiting that she was given only milk and lime water; on the 15th all medicine and the milk were omitted, and later in the day she was given scraped beef. The vomiting still continued, and on the 17th she was to have nothing by mouth, and to receive an enema of one egg beaten up with ten grains of pepsin every four hours. Four days later she was given every two hours a tablespoonful of chicken soup, and the alternate hours the same amount of Mellen's food. This diet was continued, the amounts given being increased till October 8th, when other articles were added to the diet. November 1st, it is recorded: "Not much nausea for some time; pain sometimes worse than at others. Can walk well for a few minutes, then is tired and has more pain. Has consciously been gaining strength. Feels much less nervous.

The treatment was at first directed to the condition of the nervous system; she received first ext. nuc. vomic., one-third grain, ext. belladonna, one-sixth grain, zinci. oxid., two grains, in pill, three times a day. When the stomach becomes irritable, bismuth and the hydrocyanic acid were used. Dry cups and iodine were applied to the back, but after the stomach showed so much irritability the measures were directed to that.

Jane L. D., aged twenty-nine, entered December 15th. Had had about a year previously rheumatic pains in knees and calves of legs, which lasted all winter. Three weeks before entrance she began to have nausea and vomiting; the vomiting recurred daily; the vomitus was greenish and slimy; the vomiting occurred immediately after eating or drinking. There was great tenderness over the epigastrium. She had been working very hard, making long days at sewing. There was very slight œdema of feet; urine acid, 1020; trace of albumen; a few pus and a few blood globules; no casts.

All food was omitted for several hours, then milk and lime water was given in ounce doses every hour. She had no more nausea, and shortly after was able to take a reasonable amount of nourishment.

Delia L., aged thirty-four, married; has a history of syphilis; entered the hospital for a chronic ulcer of the leg. She had headache and vomiting, the latter being very obstinate. There was no albumen; no casts in urine. All medicine and food was stopped, and after some hours she was fed on a mixture of milk and lime water, equal parts, one teaspoonful every hour. The amount given was increased gradually and the proportion of lime water was diminished. After three days

she took three ounces of mixture, milk six parts, lime water one part, every hour, with a little bread; the next day she had half a pint of milk every two hours, and soon was able to take ordinary diet.—S. G. Webber, M.D., *Boston Medical and Surgical Journal.*

QUININE IN CHOLERA INFANTUM.

Called to see a patient *at night*, along with the means already advised, you will now make an important addition to your treatment. We usually, unless the case is very urgent, postpone the administration of the grand remedy, quinine, until the late hours of night. Then the violent excitement and commotion of the exacerbations have passed. The stomach is then not so irritable. Quinine, a *sedative and narcotic*, is assisted in its action by the *physiological tendency of the nervous system to repose in the night season*, and you have ample time to exhibit enough of it in order to prevent the threatened exacerbations of the next day. I am sure that the remedy is better borne, and produces its salutary effects in the most perfect manner, when exhibited in the late hours of the night. At midnight, then, we can commence its use. To an infant of six months of age and under, we give a grain of sulphate of quinine with a few grains of white sugar, diffused in a teaspoonful of cold water. To a child of twelve months, we give two grains of quinine, and to one of eighteen months, three grains. If the dose is immediately *rejected*, we repeat it over and over again every half hour. After a few repetitions enough will be absorbed by the mucous membrane of the mouth and stomach, or by the former alone, if it is not even swallowed, to bring the little patient fully under its influence. If the first dose is, however, entirely *retained*, we allow the patient to rest three or four hours. We then repeat the dose, and continue to repeat it until the thermometer in the axilla and the finger on the pulse indicate that rapid sedation is ensuing. In the large majority of cases, these effects will follow from the administration of the sulphate. The pulse will become slower and less active and bounding: the head will become cooler; and the extremities, if previously below the normal temperature, will become warmer. Not only this but the vomiting will become less frequent, or will often *entirely cease. After the first dose of quinine has been absorbed*, the bowels will become more quiet, and the renal secretion copious. The little sufferer will become tranquil, and fall asleep, sometimes for hours without awaking; but it can be easily aroused if necessary. The *narcotism* produced by quinine, in this respect, is *unlike* the stupor produced by *opium;* and besides this, instead of having a tendency to produce congestion of the brain like opium, it has *beyond all other remedies* the power of *removing an excess* of blood from the cerebral vessels. In five or six hours the administration of quinine has begun, in the large proportion of cases, seen early in their course, the fever will have *disappeared*. When this occurs, cease medication for the day. On the next afternoon or night, a slighter exacerbation will often make its appearance, and this may recur for two or three nights thereafter. In this same case, repeat the quinine in similar or diminished doses, *giving it more freely in direct proportion to the violence of the fever.* At the same time, we continue the calomel, or employ blue mass, until the presence of pure healthy bile in the dejections is perfectly evident. Now that the fever has vanished, you may associate opium in minute doses with the mercurials. If blue mass is given, have it triturated in a teaspoonful of simple syrup, and add the laudanum to it.—Otis F. Manson, M.D., in *Trans. Virginia Med. Society.*

THE TREATMENT OF HÆMORRHOIDS BY INJECTIONS OF CARBOLIC ACID.

Dr. Charles B. Kelsey, surgeon to St. Paul's Infirmary for diseases of the rectum, New York, recently opened a discussion on the treatment of hæmorrhoids, at a meeting of the New York Clinical Society, by reading a paper on the treatment by injections of carbolic acid. The paper, which appears in the August number of the *New York Medical Journal and Obstetrical Review*, opens with condensed histories of a number of cases, after which he remarks that, beginning this plan of treatment without very much confidence in it, and with the fear of causing great pain, and, perhaps, dangerous sloughing, constantly before him, the method is constantly growing in favor with him, and the more he practices it the more confidence he gains in it. With solutions of proper strength the danger of causing sloughing of tumors is very slight. There are no objections to this method which do not apply equally to others. He has once seen considerable ulceration result from it in the hands of another; but he has seen an equal amount follow the application of the ligature; and he does not consider this as a danger greatly to be feared when injections of proper strength are introduced in the proper way. It is applicable to all cases; is especially adapted to bad cases; and may be used where a cutting operation is inadmissible. It acts by setting up an amount of irritation within the tumor which results in an increase of connective tissue, a closure of the vascular loops, and a consequent hardening and decrease in the size of the hæmorrhoid. Except when sloughing occurs, the tumors are not, therefore, removed, but are rendered inert, so that they no longer either bleed or come down outside of the body. In cases in which the sphincter has become weakened by distension, the injections will also have a decided effect in contracting the anal orifice, as injections of ergot or strychnine do in cases of prolapsus. He has used this method of treatment now many times, and has

never, except in one case, had reason to regret using it, or to be dissatisfied with its results, so far as he has been able to follow them. Although slow to advocate any one treatment of this affection to the exclusion of all others, he now generally adopts this from the outset in each case, reserving Allingham's operation for any in which the injections may fail. As yet he has met with no such case. Its advantages over all other methods, provided its results prove equally satisfactory, are manifest. The patient is not terrified at the outset by the prospect of a surgical operation, is not confined to his bed, and is not subjected to any suffering. The cure goes on painlessly, and almost without his consciousness. The method requires some practice and some skill in manipulation, in getting a good view of the point to be injected, and in making the injection properly; but this is soon acquired; and he is more and more convinced that the fear of producing ulceration is an exaggerated one, and that when ulceration is produced, it is a result either of a solution of too great strength, or of one improperly administered.

THE CANADA MEDICAL RECORD,

A Monthly Journal of Medicine and Surgery.

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SUBSCRIPTION TWO DOLLARS PER ANNUM.

All communications and Exchanges must be addressed to the Editors, Drawer 356, *Post Office, Montreal.*

MONTREAL, OCTOBER, 1882.

CELEBRATION OF THE OPENING OF THE FIFTIETH SESSION OF THE FACULTY OF MEDICINE OF McGILL UNIVERSITY.

The occasion of the opening of the 50th Session of the Medical Faculty of McGill University, which took place on the 3rd of October, was made the occasion of celebrations which must have been very gratifying to all who took part in them. On the 4th of October Dr. R. P. Howard, who was that morning elected Dean, in place of Dr. Campbell deceased, delivered an introductory lecture in the Lecture Hall of the Redpath Museum, before a large number of ladies, gentlemen and students. The first portion of the lecture embraced the history of the Faculty from its organisation, but, as the main facts are included in the paper by Dr. David, which will be found in this issue, we do not publish an abstract of it. The latter half was a history of Dr. Campbell's life and connection with the school. At the conclusion of the lecture a conversazione was held in the Peter Redpath Museum. The guests were received by the wives of the Professors, and promenaded to the delightful music of the Band of the 65th Batt. Canadian Volunteers. Light refreshments were served during the evening.

On the following evening, October 5th, the Faculty entertained about 200 of their graduates and friends to a magnificent banquet, which took place in the large dining hall of the Windsor Hotel. Dr. R. P. Howard, Dean of the Faculty, occupied the chair, supported on either side by the Lieut.-Governor of Quebec, Dr. Robitaille, a graduate in Medicine of the University, and Principal Dawson. Representatives from every Medical School in the Dominion were present, and presented cordial greetings from them to the McGill Faculty of Medicine. The gathering was one long to be remembered by those who took part in it, and the members of the Faculty are to be congratulated upon the handsome manner in which everything was conducted.

THE POPULAR SCIENCE MONTHLY.

The October number of this excellent magazine is of special interest. First and foremost is a portrait and biographical sketch of Professor Virchow, the eminent German pathologist. Although best known in this country as an active scientific worker, he has been no less active in the political world. He has been an alderman of Berlin since 1859, and a member of the Prussian Chamber of Deputies since 1862. He has proved himself to be one of Bismark's most vigorous and formidable opponents, so much so that in 1865 Bismark purposed challenging him to fight a duel.

Dr. Douglas Graham contributes an article on *Massage*, its mode of application and effects. He groups the various massage procedures under four heads, friction, percussion, pressure and movement.

W. Matthiew Williams writes on the *Utility of Drunkenness*, holding that drunkenness is not an unmixed evil, but from a Darwinian point of view is really an important factor in the development of the species. He argues that the survival of

the coarser, more brutal, and purely animal specimens of the human race is prejudicial to its present interests and future progress. They must consequently be removed so as to permit the survival and multiplication of the more intellectual and refined specimens. This happy result is accomplished by the spontaneous self-extinction of the coarser specimens in a manner presumably pleasant to themselves, by means of the immoderate use of intoxicating liquors.

The Annual Address of the retiring President, Professor Brush, delivered before the American Association for the Advancement of Science at Montreal, appears in this number. The subject is the progress of American Mineralogy.

ON THE TREATMENT OF PHTHISIS BY INHALATION.

Dr. S. Dowse, in the *British Medical Journal*, referring to the recent very valuable discovery of Dr. Koch, thought that the inflammatory theory of tubercle, and Dr. Sanderson's recent lectures at the College of Physicians on Inflammation, tended to support rather than detract from the results of Dr. Koch's original investigations. He said it was more than ten years ago when he first began to treat pulmonary consumption by inhalation; and he regretted that, until recently, he had not carried out his experiments with that care which so important a subject demanded. During the months of September, October, November and December, 1881, he had treated his patients in the North London Hospital for consumption by several forms of inhalation, and he almost invariably had good results. He thought, however, that the process of inhalation was far from perfect, and he hoped for better results in the future. Short histories and notes of several cases were brought forward as evidence in favor of this mode of treatment. He spoke particularly of the value of acetic ether as an inhalent; in fact, he went so far as to say that that this drug was, in his opinion, capable of dissolving nascent tubercle. The mixture which he generally used had the following composition: ℞ Thymol, ʒ iij; etheris acetici, ʒ iij; etheris sulph., ʒ i; creasoti, ʒ iij; acidi carbolici, m. xv; terebine ad. ℥ iv. Ten drops to be used at a time for an inhalation; for instance, two hours in the morning, afternoon and evening, as well as during the whole night.

EXCISION OF THE PYLORUS.

The *Medical Times and Gazette* says that Dr. Van Kleef, of the Hospital de Calvaire, Mæstricht, relates, in the *Press. Méd. Belge*, July 23, the case of a woman, aged thirty-seven, upon whom he performed excision of the pylorus on account of stenosis, supervening on ulcer of the stomach attended with severe hæmatemesis. She had become greatly reduced in strength, and for some time past had been fed by the rectum. The indurated pylorus, when removed, measured 4½ by 5 centimeters, and a quill could scarcely be introduced into its aperture. The stenosis was due to cicatricial tissue, no sign of carcinoma being present. The operation lasted two hours, and an hour or two elapsed before the patient began to awake from the anæsthetic condition. Her recovery from the state of anæmia was slow but progressive, and two months after the operation she was able to leave the hospital, weighing 39 kilograms. At the date of the report, about six months after the operation, she weighed 45 kilos.

INCONTINENCE OF URINE.

For incontinence of urine in children Dr. Janeway (*New York Med. Record*) recommends a combination of ergot, belladonna, and iodide of iron. He says that this prescription is more useful in this affection than any combination of drugs known.

To dry up the flow of milk Dr. Martin (*Med. Times and Gazette*) covers the breast with freshly picked parsley-leaves, which are renewed several times a day. They act speedily and effectually.

COLLEGE OF PHYSICIANS AND SURGEONS, PROVINCE OF QUEBEC.

SEMI-ANNUAL MEETING.

The semi-annual meeting of this College (the Provincial Medical Board) was held in the rooms of the Medical Faculty of Laval University, Quebec, on the 27th September, Dr. Robert Palmer Howard, of Montreal, President, in the chair. The following governors were present:—Dr. C. E. Lemieux and E. H. Trudel, Vice-Presidents; Drs. A. G. Belleau and F. W. Campbell, Secretaries; Dr. E. P. Lachapelle, Treaurer; Dr. Leonidas LaRue, Re-

gistrar; Drs. Jas. Lanctot, L. D. Lafontaine, E. Gervais, J. B. Gibson, O. Bonin, Alf. Simard, Robert Craik, Thos. Larue, L. T. E. Rousseau, R. A. Kennedy, T. A. Rodger, Jos. Marmette, Chas. Gingras, E. A. De St. George, C. S. Parke, R. F. Rinfret, W. Marsden, Jules Prevost, F. X. Perrault, J. A. Sewell, N. H. Ladouceur, and the Hon. J. J. Ross. After the reading and the adoption of the May meeting minutes, the President, Dr. R. P. Howard, moved, seconded by Dr. C. E. Lemieux, Vice-President,—resolved unanimously:—That the Board of Governors of the College of Physicians and Surgeons of this Province have heard with much regret of the unexpected death of Dr. George W. Campbell, late Dean of the Medical Faculty of McGill University, and its Professor of Surgery for forty years, one of the original members of this College, for some time one of its Governors, and for about half a century a distinguished practitioner of the Medical Art; and desire to bear testimony to his talents as a teacher, his eminent abilities as a practitioner, his high character as a colleague, and his honorable career as a citizen. The reports of the Assessors of Laval University at Quebec and Montreal were read and adopted, providing that the latter will give the names of the graduates, to the Montreal Secretary. The following gentlemen were admitted to the study of medicine:—J. H. Darey, Montreal; Louis V. Benoit, St. Hyacinthe; Alex. Kinloch, Montreal; H. Hervieux, St. Jerome; J. D. Fontaine, Belœil; L. S. P. Normand, Three Rivers; P. Ulric Garneau, St. André de Kamouraska, Alfred Mallet, Montreal; J. Legault, St. Valentine; A. St. Amour, Acton Vale; A. Laval, Yamaska; D. McNamara, Mile End, Montreal; G. B. Tanguay, Quebec. Mr. Key's, of Georgeville, application for registration was refused on account of being an eclectic. The following graduates received the license of the College on being sworn on their respective diplomas:—Drs. Arthur Hébert, of Quebec; Elz. Laberge, of St. Roch's, Quebec; Jos. Valere Côté, of St. Raphael de Bellechasse; G. A. Casgrain, of St. Agapit; T. W. Mills, L.R.C.P., London; Walter de Moulpied, Chas. O. Brown and Levi J. Lennox. Moved by Dr. J. B. Gibson, seconded by Dr. T. A. Rodger, resolved unanimously:—That whereas certain rumours have prevailed whereby it is stated that private examinations are given by Professors connected with a Medical School in this Province, and recognised by this College, and that on these examinations certificates are issued, purporting that the bearers are entitled to a diploma, and are in fact medical practitioners; and whereas one Emile de Lorimier, a student of this College, has publicly stated that he was so examined, and paid a large sum therefor, and holds such a certificate; and whereas, in the interest of the profession, it is the duty of this Board to ascertain if such irregular examinations are held by any school in this Province, or if certificates or diplomas are granted upon examinations other than those which take place before the Assessors appointed by this College;—be it therefore resolved that a Committee be appointed to make investigation into these statements and report at the next meeting of this Board, and that the Committee be composed of Drs. Craik, Hingston, Lachapelle, Robillard and Rodger. This resolution was proposed at the instigation of the representatives of Bishops College, on the Board. The reports of the Treasurer and of the detective officer of the College and a new tariff were submitted.

COLLEGE OF PHYSICIANS AND SURGEONS, PROVINCE OF QUEBEC.

Mr. Lamirande, the active prosecuting officer of the above College, has succeeded lately in obtaining several convictions against those who have neglected to comply with the Medical Act. Among them, Mr. Francois Xavier Destrempes, of St. Cuthbert, County of Berthier, confessed judgment on the 28th September last, paying the fine and costs. This man has practised in Canada for about 20 years.

The Medico-Chirurgical Society of Montreal have elected the following officers for the ensuing year: President, Dr. R. A. Kennedy; 1st Vice-President, Dr. T. G. Roddick; 2nd Vice-President, Dr. T. A. Rodger; Secretary, Dr. A. Henderson, Treasurer, Dr. W. A. Molson; Librarian, Dr. D. F. Gurd; Council, Drs. Geo. Ross, F. W. Campbell and Wm. Osler.

The Sessions have opened at all the Medical Schools, and the attendance, so far as we have been able to ascertain' is as follows: McGill, Montreal, 160; Bishop's, Montreal, 55; Victoria, Montreal, 150, Laval, Montreal, 40; Trinity College, Toronto, 180.

PERSONAL.

Among our old friends, who were in Montreal, during the McGill semi-centennial celebration was Dr. Brouse, Brockville; Dr. Lyon, Shawville; Dr. Battersby, Port Dover; Dr. A. D. Stevens, Dunham; Dr. McIntosh, Vankleek Hill; Dr. Pringle, Cornwall; Dr. Gibson, Cowansville; Dr. Cotton, Cowansville; Dr. H. P. Wright, Ottawa; Dr. R. A. D. King, Compton, and Dr. Walsh.

Dr. Henry Harkin (M.D. McGill, 1867) has removed from Guelph, where he settled after leaving the Allan Mail Line, and located in Montreal. Before leaving Guelph, Dr. Harkin received a handsome testimonial and address from his patients and friends.

Dr. R. Palmer Howard has been elected Dean of the McGill Faculty of Medicine, in place of the late Dr. George W. Campbell.

Dr. Bull (M.D. McGill, 1869) was in Montreal, for a few days the early part of this month. He returns to Colorado Springs where he locates for the present. Canadian Physicians sending patients to Colorado Springs, should direct them to Dr. Bull's care.

Dr. F. Wayland Campbell has been elected acting Dean of the Medical Faculty of Bishop's College.

Dr. Rottot, Dean of Laval University, has returned from Europe.

We take the following from *The China Mail* newspaper, published in Hong Kong, May 18th, 1882:

"By the steamship *Canopus* to-day (18th) we note the departure of Dr. William Young for San Francisco, *en route* for England. During the years that Dr. Young has been a resident in Hong Kong, he has been identified in a most unassuming manner with many useful and philanthropic works. We have only to mention the Native Hospital in Taipingshan, which, although nominally under the auspices of the London Missionary Society, was entirely due to Dr. Young's sacrifice of time and professional skill. In recognition of his efforts in this direction we believe that several members of the native community some time ago presented him with an address in silk. The Parsee community has also recognised Dr. Young's labors among the sick poor in a most substantial form, and to-day an influential deputation from that community went on board the *Canopus* to testify their appreciation and to wish him God-speed. Speaking from our own experience, we may state that not only to his personal friends will his departure be a serious loss, but that the sick poor, no matter of what color or creed, will have lost in him a disinterested friend."

Dr. Young (Bishop's, 1878) was formerly a resident of Montreal, and he has now returned to commence practice in this city. A prolonged residence in Hong Kong is very trying to the health of Europeans, and it is owing to this reason that he left China. We have seen the Chinese address, which is printed in the characters peculiar to the Celestial people, and which, with its oriental frame, presents a very handsome and unique appearance.

REVIEWS.

Rational Materialistic Definition of Insanity and Imbecility, with the Medical Jurisprudence of Legal Criminality, founded upon Physiological, Psychological and Clinical Observations. By HENRY HOWARD, M.R.C.S. Eng. Montreal: Dawson Brothers.

This little book is chiefly taken up with a consideration of the Hayvern murder case, which was tried in Montreal in the autumn of 1881, and was fully discussed in the October, November and December Numbers of the CANADA MEDICAL RECORD. Dr. Howard reviews the case in detail defending the hypothesis of Hayvern's insanity, and reprints from the *Canada Medical and Surgical Journal* Dr. Osler's paper on the Brains of Criminals, in which Hayvern's brain is figured and described; he also quotes criticisms of the case which have appeared in various psychological journals. We can not say that Dr. Howard has thrown much new light upon this case, or advanced anything further in support of his diagnosis which can be accepted as conclusive proof. The reviewers' opinions, which he quotes, must be accepted with considerable caution, for they have evidently been based chiefly upon Dr. Howard's own evidence, and the very imperfect newspaper reports of the case.

Although many of the author's opinions are rather *advanced*, and some of his theories a little startling, there is nevertheless much sound commonsense in his book, together with many valuable

hints and suggestions. The following extracts will serve to show the peculiarity of some of the views enunciated :—

" Now the Criminal Code of to-day is just where it was two thousand years ago, and yet we boast of our Christian civilization—we should rather call it our non-Christian civilization. All our laws are based upon the Roman law, yet our pagan forefathers never even dreamt of the crimes that have to be dealt with in the present day. But Society will say : we have been educating the people for the last fifty years, and education should diminish crime. So it should, to a degree, but not the sort of education the people are receiving : it is producing the very contrary effect, it is increasing crime ; it is creating in the people a spirit of bigotry and fanaticism, a spirit of envy, hatred and malice, a spirit of rivalry,of competition, of the most gross extravagance ; it is creating a spirit of oppression, and causing unjust and oppressive taxation upon the people, it is rendering the people more narrow-minded and more prejudiced. The man of sixty years ago who could not write his name was not half as ignorant as many of the so-called educated men of the present day, because the man of the past learned from nature and studied her laws, where the man of the present knows nothing, practically, of nature and her laws. Pride and extravagance is the order of the day, and our system of education is responsible for it ; our educational institutions are built extravagantly, not for the comfort and health of the students, but for show, for competition, that they may be seen and spoken of by strangers. Then the yearly exhibitions in all our schools, they are simply a *show*, a public show of extravagance,—parents virtually plundered, that schools may have a good public show. If our present system of education was a preventative of crime—crime in its vilest forms—then money should be paid liberally for it. But all statistics show that it is not a preventative, that crime keeps pace with education, therefore the sooner our present system is broken down the better. There never will be a sound system of education that is not based upon natural laws. There never will be a remedy found for the prevention of crime till we recognize the scientific fact that every man is what he is in virtue of his physical organization."

He still further elaborates his opinions as follows :—

" I call the intelligent man, the man with an even balanced mental organization, the man who seeks truth for truth's sake, the man who does his best to do right because it is right, and who avoids, as far as he can, wrong because it is wrong, the man of benevolence, justice and charity, such would be the characteristics of the man that I would call an intelligent man, the man of an intellectual organization ; and I deny that such a man *could* be an habitual criminal, *could* live in the breach of all natural and social laws, *could* prefer evil to good. When such a man commits crime, he does it in virtue of a pathological change in his physical mental organization."

Speaking of free will, he says :—" I hold that every man has a free will, but I deny that every man under all and every circumstances can control his imbecile or insane desire by the force of his will, or his imbecile or insane impulses by the force of the will. Moreover I maintain that an imbecile or insane desire or impulse very frequently, indeed generally, is quite independent of the will. But what of the man of ordinary intelligence ? The man of ordinary intelligence, as a rule, controls his desire by his will. I do not deny but that such men are sometimes, under extraordinary circumstances, at least extraordinary ones to him, led to be guilty of crime, and that they are responsible for their act. But I deny that such men ever can become habitual criminals. I maintain that the habitual criminal is such in virtue of his undeveloped organization, or in virtue of a pathological mental organization. In either case they are what they are in virtue of their mental organization, and, consequently, should not be held responsible (legally) for their criminal acts."

With regard to the limits of legal responsibility, he says :

" A man is legally responsible to do what he *can* do, not that which he knows it is right to do. Therefore I maintain that the insane man is not legally responsible for his acts because he is insane in virtue of pathological defect in his mental organization. The imbecile and habitual criminals are not legally responsible for their acts, because of a teratological defect in their mental organization, but the man of ordinary intelligence is, at least under ordinary circumstances, responsible to the law for his acts, because in virtue of his normal mental organization he can control his desires and actions by his will."

The Science and Art of Midwifery. By WILLIAM THOMPSON LUSK, A.M., M.D., Professor of Obstetrics and Diseases of Women and Children in the Bellevue Hospital Medical College, Consulting Physician to the Maternity Hospital, etc., etc., with numerous illustrations. New York: D. Appleton & Co. Montreal: Dawson Bros.

Of late years many excellent treatises upon obstetrics have been published, and, we may add, many that are not excellent. This work takes rank with the best, and is by far the most complete exposition of the science and art of midwifery yet written. The general arrangement is different from that usually followed, and gives an entirely original character to the work. Nothing has been omitted which can be of use to the obstetrician, as the author is thoroughly practical in his instruction, supplementing his own extensive observations with those of other modern authors, and more especially from the labors of German investigators. The first half of the work is chiefly devoted to the anatomy and histology of the subject, and here the author does not show himself so free in his observations as he does in the second part. In this latter we see the hand of one who is master of his work. In a few instances corrections are required: thus in the introduction of the blades of the forceps he directs the handle of the left blade to be held in the right hand while the left hand serves as a guide. With the patient in the dorsal position this would be found to be a very awkward procedure. Such errors have no doubt been overlooked in the revision of the text, and do not affect its value.

The practitioner will find this work to be a source of scientific and practical information, from which he may gather many new ideas of great value in practice, and the student may rely upon it as a text-book containing all that is essential to acquire a thorough knowledge of the obstetric art.

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The Diseases of the Rectum, including Fistula, Hæmorrhoids, Painful Ulcer, Stricture, Prolapsus, &c., with Diagnosis and Treatment. By WILLIAM ALLINGHAM, M.D., F.R.C.S., Surgeon to St. Mark's Hospital for Fistula, &c. Fourth edition, illustrated, paper cover. Price 75 cents. Philadelphia: P. Blakiston & Son, 1882.

Competition among publishers has resulted in giving the reading public literature in a very cheap form—works which a few years ago sold at 75 cents now being obtainable at 20 or 25 cents. It would seem as if, to a certain degree, this was going to be the case with Medical works, and due to the same cause. Some three years ago a house engaged in Medical publications began issuing monthly volumes at the rate of one dollar each—then a better class of works were issued at a slight advance. This year P. Blakiston & Son have entered as competitors, and are issuing very good works at $1.25 a volume, and, with cloth covers, at 75 cents. If this volume is a good sample of what the series will consist we have no hesitation in saying that it is deserving of encouragement. Dr. Allingham's book may be styled practical, indeed such a work as the busiest man can scarcely glance at without gathering information.

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The Treatment of Diseases by the Hypodermatic Method. By ROBERTS BARTHOLOW, M.A., M.D., LL.D. Fourth Edition, revised and enlarged. Philadelphia: J. B. Lippincott & Co., 1882.

Dr. Bartholow's reputation as an accomplished physician and careful writer is sufficient guarantee for the excellence of any work from his pen. The fourth edition of this book has been brought well up to date, having been revised, enlarged and in many parts rewritten. Among others, the actions and uses subcutaneously of the following drugs are fully considered:—The Opium Alkaloids, Atropia, Duboisia, Hyoscyamia, Strychnia, Conia, Curara, Nicotia, Hydrocyanic Acid, Physostigma, Pilocarpine, Amyl Nitrite, Chloroform, Ether and Alcohol, Chloral, Caffein, Apomorphia, Ergotin, Quinia, Carbolic Acid, Mercury and Arsenic. Chapters are added upon Aquapuncture, Irritant Injections, Injection of Ammonia into the Veins, and an important chapter upon the Opium or Morphia Habit and its Treatment. Dr. Bartholow suggests the use of the word *hypodermatic* as being more correct than *hypodermic*.

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THE CANADA MEDICAL RECORD.

VOL. XII. MONTREAL, NOVEMBER, 1882. No. 2

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OBSTETRICAL MEMORANDA.

CASE OF INTERSTITIAL FŒTATION.

By Carr Holstok Roberts, L.R.C.P.L., M.R.C.S. Eng., L.S.A., M.B., M.A.

The rarity of these cases induces me to ask you to give me a niche in your columns for a short description of this one :

On Sunday evening, the 1st inst., at half-past ten, I was requested by the husband of the patient to come and see his wife; he stated that they had gone to bed as usual and had been to sleep, when his wife woke him, and said that she had been woke by "pains in the stomach, and could'nt get rid of them, nor go to sleep again." He had given her some brandy, but without any good effect.

I found her in bed; a tall, stout woman, aged 32, complaining of pain in the abdomen (which, however, was not swollen or tender, nor was the pain aggravated by pressure), of sickness, and slight diarrhœa, which she attributed to her having taken Pil. Cochia pills. The vomit looked only like semi-digested food, and the diarrhœa was only like the loose motion that would be produced by a purgative; her skin was cool and moist, her pulse good, and her respiration and temperature both normal. She was perfectly conscious, quite calm and collected, and there was nothing whatever to indicate such a sudden and fatal termination as took place. I elicited that she had missed two periods. She had had two (only) children, both born at the full period, and both living. The youngest, being fourteen months old, had been weaned about two months. She had never had a miscarriage, but thinking it most probable that such was the nature of this illness, I gave her opium, ammonia, and chloric ether, and ordered hot fomentations, and linseed poultices to the abdomen, with a little brandy at intervals, and left instructions to be sent for if necessary. I was not, however, called again until 8 a.m. the following morning, as she had suddenly become much worse. I then found her in a state of collapse, and evidently dying, but perfectly conscious, and complaining of a great desire to pass water. She had, however, done so during the night, and the bowels had been once relieved, but she was not purged. I passed a catheter, but the bladder was empty. She became rapidly worse (there had been no more vomiting), but remained perfectly conscious until half-past ten, when she expired. I should have said that her previous health history was very good.

Autopsy.—There were no external marks of violence: the body was, for a woman of her age, very fat, the abdominal cavity was full of clots and bloody liquid—the clots weighed very nearly six pounds, and the fluid measured five pints. Floating amongst this was a fœtus (apparently

about two months) enveloped in its membranes, and with the placenta attached. At the upper part of the uterus there was a rupture, close by the right Fallopian tube, large enough to contain three fingers, looking like a sac the walls of which were extremely thin.

There was no communication between it and the interior of the uterus, which weighed exactly eight ounces. The heart was fatty and somewhat flabby, and was perfectly empty, as were also all the large bloodvessels. The other organs of the body appeared perfectly healthy. The head was not examined. The uterus, etc., etc., has been sent through Mr. Dorian to the Museum of the Royal College of Surgeons. I have no remarks to make on the case, except as to the absence of the graver symptoms, until within so short a time of the death. The blood had evidently continued oozing out, until there was no more to come; the apparent desire to pass water was evidently caused by the pressure of the clots, etc.

Society Proceedings.

MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

Stated Meeting, Sept. 22nd, 1882.

GEORGE ROSS, M.D., PRESIDENT, IN THE CHAIR.

Pathological Specimens.—Dr. Shepherd exhibited a specimen of ossification of the sacro-iliac synchondrosis. On separation of the bones, the articular surfaces appeared quite healthy, but those of the lumbo-sacral articulations were somewhat diseased. This condition is sometimes found to be congenital, but in the case under notice Dr. Shepherd thought it was of rheumatic origin.

Subject of Paper.—Dr. Alloway narrated the following case: The patient, a woman, aged 24, was attended by himself and Dr. Rodger in her confinement. She had been in labour about 12 hours. Occipito-posterior position. Ether was administered, and Simpson's long forceps applied. During traction the head suddenly slipped from under the pubic arch and carried away the perineal body, sphincter ani and the recto-vaginal septum for fully two and a half inches in its extent upwards (length of index finger). The immediate operation was done, which was a combination of Simon's and Emmet's. The rent in the bowel was first united by interrupted sutures of strong grey thread, the only material obtained at the time. The perineum was united in the ordinary way, care being taken that the lower or Emmet's suture was entered low down on a level with the lower margin of the anus, on the left side, passing upwards and inwards over to the opposite side, and downwards to the point corresponding to its entrance on the left side. The vagina was well washed out with carbolized warm water, the parts anointed with vaseline, and the patient's knees tied together. The carbolized injections were continued every two hours by a very faithful nurse in attendance. On the fourth day diarrhœa set in, which could not be arrested until several days had elapsed, it being due to the milk the patient was taking. The fluid fæces passed between the sutures into the vagina. Patient became very despondent, thinking she was ruined for life. On the 10th day carbolized injections reduced to twice only. On the 15th day removed all the perineal sutures, except Emmet's. This was left until the 18th day, when it and all the internal sutures were removed through the bowel. There was still a small fistulous opening in front of the sphincter. This, however, had completely closed by the 22nd day. From this out the patient made a perfect recovery. Was examined some months afterwards, and exhibited no laceration of the cervix, unless it had completely healed, and had a perfect perineum. Uterus normal depth. Dr. Alloway drew attention to the fortunate accident of diarrhœa having set in shortly after the operation, and alluded to a paper just then published in the *New York Medical Record* (July) by Dr. H. T. Hank, of the Woman's Hospital, New York, upon the advisability of intentionally keeping the bowels loose during the whole period of treatment, from the second day after operation. Dr. Alloway attributed much of the successful issue to this circumstance.

Discussion on Paper.—Dr. Kennedy spoke of the great frequency of laceration of the perineum, especially in occipito-posterior positions of the head, in spite of the most skillful precautions on the part of the accoucheur. In such cases he favored the method recommended by Dr. White, of Buffalo, of making lateral incisions on both sides as soon as the perineum becomes distended, thus preventing laceration through the perineal body, which is always more slow to heal. His experience was limited to laceration through the sphincter, which he always treats by immediate operation,

and with success in the majority of cases. He mentioned having seen one case in which the septum was destroyed and the patient had recovered to her own perfect satisfaction, without operation. No opportunity offered for a subsequent examination in this case. He favored keeping the bowels loose during the convalescence, and was inclined to ascribe much of the good result in Dr. Alloway's case to this condition. In conclusion, he asked why ether was used in preference to chloroform. He personally favored the use of chloroform, as the voluntary muscles are more relaxed by its use, and lying-in women appeared to enjoy immunity from its poisonous action. If pushed to its full action it tends to favor flooding, but he thought this action was due more to its lessening reflex irritability than from any other cause.

In reply, Dr. Alloway said he invariably uses ether, feeling much safer with it, and has never met with that relaxation of the uterus which he has frequently noticed after using chloroform. Dr. Cameron also favored immediate operation in these cases, as the difficulties are increased the onger it is put off; he thought sutures of silver wire were preferable to those of silk in the rectal tear, and these were easily applied by means of Pean's needles. Dr. Roddick thought sutures of catgut were specially advisable in the rectal tear, as they required no further attention; he also recommended the use of intermediate sutures of catgut in the perineum as being preferable to all wire. Accidents with chloroform are rare in midwifery practice owing to the minor degree of anæsthesia induced, and the eagerness with which it is taken as a rule, whereas in general surgery the patients frequently resist, and thus, possibly, the danger is increased. Dr. Ross complimented the reader of the paper on the readiness with which he had made use of the means at his disposal in the emergency, but thought he was singular in the use of ether in preference to chloroform, and that he had shown no special reason why the latter should not be used. The fact that flooding had followed its use was merely a *post hoc* argument, and it might also occur with ether; at the same time, he recognized the great danger of using chloroform in ordinary surgical practice. The great inflammability of ether, its bulk, and the offensiveness of its odor, all argue strongly against its use in midwifery practice.

Drs. Macdonnell and Mills also took part in the discussion, after which the meeting adjourned.

Stated Meeting, October 6th, 1882.

GEORGE ROSS, M.D., PRESIDENT, IN THE CHAIR.

This being the first meeting in October, was also the annual meeting.

President's Address.—The President, in delivering his address, gave a short *resumé* of the work of the Society during the past year, but, before proceeding to do so, made allusion to the removal by death of Dr. George W. Campbell, one of the Society's oldest and most respected members. He had always taken an active interest in the work of the Society, until failing health compelled him, unwillingly, however, to absent himself from its meetings. The Society has had to mourn his loss, but by his example should be stimulated to further exertion in its work. The question o public health was next referred to. During the past year a draft of a bill was prepared by the City Health Officer and the advising attorney for the purpose of seeking for the incorporation of a complete system of supervision of public health; this was submitted to a joint committee from the Board of Health and from the Medical Societies. This bill has not yet become law, but there is a prospect of its soon passing the Legislature. In August last the city was honored by the presence of the members o the American Association for the Advancement of Science, among whom were many medical men from the United States and Europe. The meetings have been regularly held, the attendance has always been good, and the amount of work done has been very satisfactory. A number of interesting papers have been read by members, the topics of which have been extremely varied, and in most instances have given rise to animated and profitable discussions. The pathological specimens and anatomical preparations exhibited during the year have also been numerous and interesting.

At this stage of the proceedings, Dr. Osler announced that Dr. Workman of Toronto, who had been on a recent visit to this city, was about leaving, and before allowing him to do so, thought the Society should in some way express to him its sense of his many excellent qualities and its high appreciation of the services rendered by him to the medical profession. He then moved the following resolution, seconded by Dr. F. W. Campbell:—"*Resolved*,—That the members of

the Medico-Chirurgical Society of Montreal, in session this evening, cannot allow the opportunity to pass of expressing to you the pleasure your visit to this city has been to them. They feel that to you the medical societies of Canada owe much, your zeal and ability having always been liberally expended in promoting their welfare; and desire to express the hope that you may still be spared for many years to give them the benefit of your wisdom and counsel."

Subject of Paper.—Dr. F. W. Campbell then read to the Society the paper by Dr. A. H. David (who from severe illness was prevented from being present), entitled "Reminiscences connected with the Medical History of Montreal during the last fifty years." Dr. David's paper was published in the October number.

Stated Meeting October 20th, 1882.

Dr. R. A. Kennedy, the President, in the Chair.

Pathological Specimens.—Dr. Osler exhibited the following specimens:

(*a*) A specimen from a case of fatty diarrhœa, sent by Dr. Wolverton, of Hamilton. A woman æt. 30 had suffered for some weeks with gastro-intestinal disturbance, and for the past two weeks the dejections contained a remarkable amount of fat. Dr. Wolverton has promised a full report of the case.

(*b*) A portion of the paunch of a cow presenting numerous examples of "Amphistoma Conicum," a fluke not uncommon in this region in "Ruminants." It would appear to be particularly abundant in the animals in Pictou County, N.S.

(*c*) Specimens of obliterated superior vena cava from a patient of Dr. Wilkins, who had been in the hospital some twelve weeks with symptoms of venous obstruction in the thorax, lividity and swelling of face and upper extremities, with attacks of intense dyspnœa. Constantly accumulating effusions occurred into the left plural cavity, necessitating frequent tappings. The superior cava was obliterated in its entire length and converted into a firm fibrous cord, about the thickness of the thumb. The internal jugulars and innominata contained fine thrombi undergoing fibroid transformation. Between the ascending aorta and the right lung there was a good deal of cicatricial tissue covering over and surrounding the obliterated vein. No heart disease or other lesion found.

(*d*) Specimen of a case of pneumonia terminating in abscess of the lung. The patient was under care of Dr. Molson in the hospital, a very intemperate woman aged 35, brought to hospital on the 4th day from onset of a severe pneumonia of the left lung, following a heavy drinking bout. On the 10th day she spat up large quantities of stinking purulent matter, and at the same time the temperature, which had remained about 104°, fell to 99°. She died on the following day.

Dr. Osler then exhibited some eighteen ounces of bile, obtained by aspirating the gall bladder of a patient, having the following history:

C. M. S., æt. 58, farmer, of fairly good health, with phthisical history on mother's side. In the month of April last first felt pain in back and shoulders and across the kidneys, did his spring work and did not consult any doctor. Early in June he noticed his water was dark, and his face became jaundiced and deeper than at present. Never had any paroxysmal pain, but pain was of a dull heavy character; no vomiting, lost much flesh in last two months, clay-colored stools, great itchiness, sleepless, appetite good. Present condition: Well-preserved man, not very grey, skin jaundiced, walks bent because of pain, conjunctivæ stained, tongue clean, breath not bad, abdomen flat, a little prominent in right hypochondriac region; liver dullness greatly increased, and a rounded mass is felt on right side of abdomen, corresponding to upper half of area of increased dullness, movable, elastic and evidently connected with the liver; surface of liver below costal border not roughened, a little tender below xiphoid cartilage. The distended gall bladder was aspirated, and about 18 oz. bile removed, but without much benefit; nature of obstruction not quite clear; no history of gall stone.

Dr. Bell exhibited a bladder in a state of phlegmonous inflammation from a patient who died in the hospital from the effects of fracture of the spine.

Dr. Shepherd exhibited two femurs which belonged to an old woman æt. between 80 and 90 years, the subject of general "Fragilitos Osium," or senile atrophy of bones. The left femur had the characteristic deformity of osteo arthritis, the neck being shortened and the head enlarged; the acetabulum of that side was much enlarged also. In this femur there was an old

united fracture just above the condyles. In the right femur there was an ununited intracapsular fracture. Dr. Shepherd remarked that all the bones presented the atrophic condition, the skull cap in particular, being only of parchment thickness. The astragalus could be easily broken down between the finger and thumb; very slight accidents in these cases are liable to produce fracture.

Cancer of Œsophagus.—The next specimen was exhibited by Dr. Ross, who also made a few remarks on the history of the case. The patient from whom the specimen was taken, J. M., æt. 54, was admitted into the General Hospital Oct. 10th, 1882, complaining of cough, pain in epigastric region and weakness. In May had pain in mid-sternum and to the left side. In June had frequent vomiting; after a time solids seemed to be stopped on the way down, to roll about in his and then would be at once brought up. Has lived on soft toast, tea, and milk for a long time. Has been intemperate. Began to cough three weeks ago, and soon noticed a very foul smell coming up his throat with the cough.

Status Prævus—Anæmic and emaciated pulse weak; sharp bubbling sounds heard at base of right lung to spine of scapula and into the axilla. Expectoration serous with purulent masses, faint, fetid odor. Liver felt greatly enlarged, smooth and very little tender. A large-sized bougie was passed readily into the stomach, no obstruction; was made to swallow dry bread, which he did well. In spite of the negative signs given by the passage of the bougie the case was considered to be one of cancer of œsophagus with secondary affection of lung, and possibly fatty or cancerous liver.

Post Mortem.—The œsophagus presented an enormous cancerous ulcer situated in its lower half, extending for about four inches and involving nearly the whole circumference of the tube with the exception of a narrow tube-like portion on the posterior wall. The edges were swollen and infiltrated, and the base presented a deep excavation which at the right margin had perforated the lung, and formed near the root a series of sloughy abscesses in an area about size of an orange; there were extensive secondary masses in the liver, particularly in the left lobe.

Remarks on Specimens Exhibited.

Dr. Mills, in cases of cancer of œsophagus, thought the passage of the bougie might be explained by a peculiar turn of the instrument; he thought it would have been a good case for auscultation of the œsophagus.

Dr. Ross, on the other hand, thought aus cultation would have also failed, inasmuch as there was no obstruction; he thought œsophagoscopy would have been more desirable.

Dr. Mills then explained the mechanism of Morrell Mackenzie's apparatus for œsophagoscopy He did not agree with Dr. Ross in regard to aus. cultation, the œsophagus being a closed tube. Although no obstructions were present its walls were so diseased that they could not act muscularly, and thus, in swallowing, the sounds would be delayed sufficiently to be appreciated by means of the stethoscope.

Dr. Osler also agreed with the last speaker; he had had some experience in œsophageal ascultation in the Vienna Clinique, and the difference in the sounds was very marked.

Dr. Henry Howard, speaking in regard to the bonis exhibited by Dr. Shepherd, remarked that such a condition was frequently found in aged persons of unsound mind, and accidents were frequently occurring in lunatic asylums from very slight causes, owing to this fact.

Dr. Roddick reported a case of laceration of the left kidney, followed by death on the fourth day. The case occurred in the practice of Dr. Simpson, with whom he had seen the patient in consultation. The patient, a woman of sixty years, but remarkably healthy and vigorous, fell accidentally from the top to the bottom of a long stairway, and was picked up in an insensible condition. There was no wound to be found, but she complained from the first of great pain in the right loin. Vomiting soon began, and, in spite of all treatment, continued to the end. The bowels became tympanitic, and refused to act. The most marked symptom, however, was the passage of pure blood from the bladder. This formed a large clot in the vessel, and urine was for some hours almost absent. The urine after the first twenty-four hours became more and more smoky, until, on the fourth day, it was almost bloodless. Rupture of the kidney was diagnosed, and, on account of the obstinate condition of the bowels, ileus was suspected, although no tumor could be felt. The long O'Berne's tube was passed, and a large injection thrown into the bowel, but with no effect.

At the autopsy a large clot of blood was found surrounding the right kidney, and a rent through the border of the organ, communicating with the

pelvis, whence the blood evidently came. The kidneys were slightly granular. The bowels were found unobstructed, although it was thought that the blood clot might have pressed unduly on the ascending colon, and interfered with its functions.

Clinical Notes on Hœmatemesis in Chronic Splenic Tumors, by Dr. Osler.

Dr. Osler commenced his paper by alluding to the frequency with which hœmorrhages are associated with all forms of splenic tumors, especially in that accompanying leucocythemia, a depraved condition of the blood seeming to be the chief factor in their production, they being also met with in profound anemias, not of splenic origin. Epistaxes are the most frequent, and next hœmorrhages from the bowels, but hœmatemesis, hœmoptysis and hœmturia are also occasionally met with. Of 150 cases of leucocythemia collected by Gowers, hœmorrhages occurred in eighty, and eight of these were from the stomach. The point to which attention was chiefly called was the possible occurrence in some instances of severe, perhaps fatal, hœmatemesis, even before the constitutional symptoms are marked, and indeed may be the first symptom complained of; and hence the great importance of directing the attention to the spleen as well as to the liver as a possible cause in an attack of vomiting of blood. In illustration of this fact, the following cases were referred to:

Case 1. J. H., æt. 36, admitted to hospital, September, 1879, with anemia. Has been healthy and temperate, had intermitting fever in India. In January, 1877, had an attack of vomiting of blood, preceded by slight indisposition, weight in abdomen and nausea; had three attacks that week, each time losing a large amount of blood, and was much reduced. Strength returned slowly, and he resumed work. In July had another single large hœmorrhage with a severe diarrhœa, and shortly after another hœmorrhage. During July and August the abdomen, which had been noticed somewhat prominent at beginning of trouble in January, now increased considerably. On admission there was marked anemia, abdominal distension and œdema of ankles. Spleen greatly enlarged. The blood was thin and watery, and microscopically presented characters of anemia. Red corpuscles reduced below two millions to cubic millimetre and hœmaglonia correspondingly diminished. No leukœmia. Heart's action was always a little excited; pulse about 100; hœmic murmur present; sweats were troublesome. He took iron with benefit, œdema of ankles disappeared, and belly diminished in size; left hospital in a month, during which time he had no hœmorrhage. He died subsequently at home from effects of a severe hœmorrhage.

Case 2, August 13th, 1882. A little girl, æt. 11, brought from Kingston, Ont., for examination; of good family history and of previous good health, excepting four years ago, when she was not very well, and the mother thinks she vomited a quantity of blood-tinged matter, but this is doubtful. Two years ago, during a slight indisposition, with some pain in abdomen, which also appeared swollen, she had a severe hœmatemesis, lasting over twelve hours vomiting a basinful of blood. Recovered from this and seemed to thrive, although pale. In July last, one month ago, a brother died, and the excitement brought on another attack, lasting thirty-six hours, and she lost nearly three quarts of blood, and since then has picked up rapidly. She was well nourished and stout, but face pale, and puffy look about eyes. Complained of uneasy fulness about stomach, swelling of feet in evenings, and shortness of breath when walking fast or going up stairs, and lately her appetite has failed. Heart and lungs appeared normal; sounds clear; no murmur. Abdomen a little distended paniculus adiposus thick, splenic tumor extends three inches below costal border and to within an inch of navel, edge clearly felt and not painful. Liver not enlarged. Abdominal veins not distended, no signs of ascites. Blood thin, corpuscles normal in size and general appearance, no increase of the colorless elements. Red corpuscles 2¼ millions per cubic millimetre; ratio of white to red 1 to 316.

Dr. Osler then referred to two cases occurring in the practice of Dr. R. P. Howard, which also illustrated the same point.

Case (*a*). A plump, well-nourished lad, æt. 13, four years ago was unwell and passed blood from the bowels, and was pale. On the 12th April last had an attack of vomiting of blood, and shortly after a large bloody stool. On the day before had played "Lacrosse" and seemed in fair health; he died four days after from the effects of repeated vomitings, having lost about four pints of blood. The spleen was enlarged and the blood leukæmic. At the autopsy the spleen was found much enlarged, weighing 480 grains. No erosions or ulceration of stomach; mucous membrane pale.

Case (*b*). Young American lady at school in this city was suddenly attacked with violent hæmatemesis, which rapidly proved fatal. She had been in apparently good health, was well nourished, and neither she nor her parents suspected any disease. At the autopsy the spleen was found enlarged and firm, and the blood in the portal vein was markedly leukæmic. A peculiar malformation was met with in this case, the portal vein presenting a double trunk.

Discussion on Paper.—Dr. Buller asked for information as to the supposed possible cause of hæmorrhage in these cases, if mechanical or due to condition of blood.

Dr. Osler replied that in some cases it would seem to be due perhaps to a feeble condition of the vessels as in leucocythemia and pernicious anæmia.

In the cases under notice it might be explained by mechanical causes, considering that three fourths of the blood from the stomach is discharged into the splenic vein, and in engorgement of the latter a sweating or diapedesis might be conceived as occurring from the vessels of the stomach.

Dr. Ross spoke of the obscurity connected with such accidents occurring under such peculiar circumstances, and the exact conditions giving rise to them. In the early stages of cirrhosis we also have profuse hæmorrhages, and possibly the cases are of a parallel nature; probably other conditions have something to do with it. The great depression in mind spoken of in connection with one of the cases might have influenced the nerve supply of the blood vessels, allowing more or less dilatation of the splenic vein and damming back the blood into the gastric veins'

In reply to a question by the President, Dr. Osler said that he had used injections of ergotine, but could not say with much benefit.

Dr. Stephen remarked that in a recent number of the *Lancet* injections into the substance of the spleen had been condemned as being dangertou and unadvisable.

Dr. F. W. Campbell thought that something would be required to act more quickly than ergotine, and suggested that the application of the ice-bag to the pit of the stomach would be specially good.

Stated Meeting, November 3, 1882.

THE PRESIDENT, DR. R. A. KENNEDY, IN THE CHAIR.

Dr. Major then read a paper on papillomatous growths of the larynx, reporting two cases of simple papilloma, one of warty growth, in a case of rapid tuberculosis, and one of warty growths of the velusus valati.

Dr. Major considered that papillomata did not present themselves so commonly on this continent as in Europe, if he might judge from the number of cases that had occurred in his private and hospital practice. In expressing this opinion he did not include the fringe-like growths so often observed in laryngeal phthisis.

During the past five years in his clinic at the Montreal General Hospital, where he had extended opportunities for investigating laryngeal disease, come six (6) only had been met with.

Few cases of vocal disability either in the wards or out-patient department were left unexamined, and he believed that if any morbid growths were present in those examined he would undoubtedly have discovered them. It was in private practice that we would naturally look for the more frequent occurrence of these growths, and for obvious reasons.

In private he had seen but three cases of simple papilloma; he suggested that possibly the dry atmosphere of the climate might account for their apparent rarity.

Two of the cases reported had occurred within a few weeks of each other, but it would not do to argue that because two had been seen within so short an interval, that, therefore, the condition was common.

In the Spring of 1881, E. M., aged 4 years, was referred to him for examination. The breathing was difficult, and the child presented a miserable appearance. The laryngoscope showed the existence of extensive sessile, warty growths, covering the surface of both vocal bands and entering the ventricles, and general hyperæmia of the surrounding parts. Two years previously the child was the subject of an attack of acute laryngitis, recovery was slow, hoarseness of varying intensity, ending in complete aphonia and accompanied with embarrassed respiration.

The usual nocturnal aggravations were observed, he performed tracheotomy, from which date more or less improvement, local and general, was obtained.

He observed, however, the tendency of these growths to increased development on the removal of the tube.

In August last these growths had so far disappeared, that the vocal and respiratory power were almost normal. An acute cold, however, ushered in with fever, so far aggravated matters, that recourse to the tube was again necessary. The tendency to recurrence of these growths was probably due to some constitutional peculiarity aided by a local hyperæmia favoring their development.

In June of the same year a lady aged 45, who had suffered from aphonia for six years, and who gave the history of a laryngitis the result of cold, sought his advice. On listening to her breathing the inspiratory current was not interfered with, while obstruction to respiratory breathing was noticeable; this difficulty was increased on phonation.

Laryngoscopic examination showed on phonation a growth about the size of a wild raspberry, attached to the under surface of the right vocal band, and extending beyond the anterior commissure. The patient objected to an intralaryngeal operation. On the following day he attempted to remove the growth by an operation through the crico-thyroid membrane, but found it necessary to divide the cricoid cartilage in addition.

The growth was removed piece by piece, the origin scraped and a probe armed with lunar caustic applied.

Fearing more or less swelling, a tracheotomy tube was introduced, chloroform was badly borne, and it was with difficulty the patient was carried through the narcosis with safety.

Either as the result of the caustic application or of the forcible distention of the cricoid cartilage, perichondrial inflammation set in; this in a few weeks subsided, and a satisfactory result obtained. On the 26th June, 1882, no recurrence had taken place, and the patient was in the enjoyment of good voice and health.

On Sept. 30th, 1880, J. T. H. was referred to him for aphonia and an irritating cough, had suffered from pneumonia the year before. On examination minute feathery growths were observed on posterior walls of larynx. Pear-shaped swelling of the aryternoids, laryngeal surface pale and bathed with moisture. The growths were removed with forceps, affording relief to the cough.

Two weeks later, high temperature ushered general tuberculosis, marked head symptoms and fatal result within four (4) weeks. Post-mortem examination confirmed the diagnosis.

A great variety of opinion exists as to whether these growths may be looked upon as a special indication of phthisis, or merely as an accidental occurrence, the result of the continued presence of moisture. The writer attached some importance to their presence as an aid to diagnosis. Whatever might be their immediate cause, in his experience he could not call to mind a single instance where these fine thread-like developments had existed on the posterior wall of the larynx or interaryternoid space in which grave fears of tuberculosis did not exist.

He did not mean to say that they were met within every case of tubercular disease of the larynx, but where he found general pallor of surrounding parts, great moisture, and these growths, he at least regarded them with suspicion.

He remarked the great tendency of papillomatous growths to recur, and also referred to the opinion held by some that continued irritation of them by forceps would lead to malignancy. In this opinion he did not share, as he thought it more than likely that cases afterward discovered to be malignant were of that character from the first.

Warts in the larynx were of the same pathological nature as warts elsewhere, subject to the same changes, making all due allowance for locality. They were subject to spontaneous and unaccountable disappearance, and before operating all due allowance must be made for this tendency.

He referred to the different means of removing them, and laid great stress on the necessity for after-treatment.

He suggested that in all cases where it became necessary to divide the cricoid cartilage (a procedure that should never be resorted to unless in cases of necessity, for the reason that the cricoid forms the immovable base of the larynx, and any change in its position must materially affect the movements of the superimposed parts, to say nothing of the very low vitality of this cartilage, and the great tendency of its posterior plate, to undergo necrosis), more especially where a tube was required to be worn for any time; it would be well to remove a small section from each side of the cut surface, and thus lessen the pressure exerted by the tube, and the strain on the posterior plate. By this means he thought an operation, that

otherwise was unscientific might, occasionally at least, be tolerated.

Discussion on Paper.—Dr. Osler, in reply to Dr. Major in regard to the pathology of papilloma of the vocal cords, said he did not think it differed from ordinary papilloma of other regions; those of the larynx seemed to be abnormal growths of the epithelial layers. He asked Dr. Major if it were possible to distinguish this growth from an epithelioma, and whether it ever passed into an epithelioma.

Dr. Roddick in speaking of the operation referred to by Dr. Major, at which he assisted, expressed his pleasure at the skillful manner in which the tumor was removed, although not unattended with difficulty, the tumor being he thought larger than it appeared by the laryngoscope, and at one time the patient being in a very alarming condition. He asked Dr. Major why he did not remove the growth by opening the thyroid cartilages, and if it would not be preferable to have permanent aphonia than necessitating the continual carrying of a tube.

Dr. Mills said growths of this kind and their removal was a very debatable subject. Morrell McKenzie prefers their removal, and by evulsion, while Lennox Brown says that benign growths often become malignant even when well removed, whereas McKenzie does not think so. He thought from his experience that they are of more frequent occurrence than Dr. Major had shown. Malignant disease cannot be diagnosed if you rely on ordinary signs, as the glands, cachexia and pain. He thought it a mistake after the removal of such growths to allow the patient to return home, as subsequent cauterizations are always advisable. Evulsion he considered as not being always practicable. He also spoke of the advisability of educating the throat not only by the physician but also by the patient to render skillful examination practicable. In all cases of aphonia careful examination of the throat should be made early. He would object to thyrotomy unless to save life.

Dr. Major in reply said it was exceedingly difficult to diagnose between the epithelioma and papilloma, as a rule time and history alone will decide. In this case thyrotomy was thought of, but the hope that the growths would ultimately disappear led him to put it off. And as a rule the tracheotomy tube is well borne.

PAPER BY DR. BESSEY. SUBJECT—A PROPOSED VACCINE INSTITUTE.

Dr. B. commenced by referring to the history of animal vaccination in Canada, the first attempt towards which was in the year 1875 in this city, but which for some reason or other was in a short time abandoned, and about the same time in a town in Ontario an attempt was made to furnish animal virus to the profession, but it also was soon discontinued. In 1877 a spontaneous epidemic of cowpox having occurred at Longue Pointe, Dr. Bessey was afforded opportunity of procuring abundance of lymph, which he continued to furnish to the Montreal Board of Health for two years. In 1880 an allowance of twenty dollars per month was voted by the Board as a permanent subsidy to defray the expenses incurred in keeping the animals required, Dr. Bessey agreeing to furnish the Board (for the use of the public vaccinators) from time to time with such an amount of lymph as experience showed was necessary, each vaccinator being charged to collect the lymph from his first vaccinations to continue the service until the distribution of the next supply. An estimate given of the numbers vaccinated during the years 1878, '79, '80 and '81, compared with the average birth rate and allowing 25 per cent. to be deducted for death rate, shewed that there must remain a large number still unprotected.

In the year 1872 there were 872 deaths from small-pox, and in the four following years 728, 647, 590 and 704 respectively. Prior to 1877, when annimal vaccination was introduced, public opinio in certain quarters had been very strong against general vaccination, till the people becoming convinced of its safety began to submit very generally to the operation, after which the prevalence of small-pox began to decline, and has finally disappeared altogether.

The deaths in 1877 amounted to 506 and in 1878, 728; in 1879, 472; in 1880, 140; in 1881 only 5 deaths occurred, and this year there have been no deaths so far.

It had been found by experience that lymph one or two removes from the animal gave the most perfect results; and while animal vaccine guarantees against the transmission of syphilis (which has been shewn by well-authenticated cases to occur with the use of humanized lymph, however rarely), and while it is believed to afford perfect immunity from attacks of small-pox, yet it is the experience of many that frequently there is difficulty in making

preserved vaccine "take" on the human subject, the average number of successes being about 80 per cent., whereas those of the 1st human remove average 98 per cent. This difficulty the reader of the paper thought could be removed by: 1st. An ample and constant daily supply; 2d. Its careful preservation or immediate use; and, 3rd. The establishment of a national vaccine institute. Dr. Bessey stated that in the United States lately serious consequences had followed the use of so-called vaccine lymph furnished from some 14 vaccine farms, which fact, on investigation, was found to be due to the want of skill on the part of those employed in its collection. For some time past Dr. Bessey has been striving for the establishment of such an institution as the one proposed, and many petitions have been sent to the Government, but without receiving much more than a bare recognition, until, lately, the Joly Government offered ten acres of the Government farm at the Tanneries in perpetuity, but they had no money to put buildings thereon. More recently the Chapleau Government signified its willingness to vote a small annual subsidy, and also continue Mr. Joly's offer, provided the Dominion Government would build, or aid in putting up the necessary buildings. This was the subject of a letter to the Hon. J. H. Pope, the Minister of Agriculture, who replied that, while recognising the advantage of such an institution, there was no vote from which the sum of money could be furnished. In the meantime a new Premier and a new Government have come into power, to whom application would have to be made to ratify the offers of the two former Premiers; and while awaiting the action of the Government Dr. Bessey thought the Society, by concerted action, might do much, whereby a suitable building might be erected, and thus have the grant of land secured at any rate. Dr. Bessey submitted to the Society a plan of such an establishment as he thought would be desirable, which would call for an outlay of about five thousand dollars, to build, equip, and put in running condition.

Discussion on Paper.—Dr. Hingston stated that to the efforts of Dr. Bessey was very much due the removing of the strong opposition on the part of the French, by using animal virus in vaccinations; he, however, took exception to the view of Dr. Bessey in regard to the transmission of syphilis by vaccine lymph, which was believed to be impossible by some of the ablest men in Europe; but, when such infection did occur, it was through the blood of the crust and not from the lymph.

Dr. Osler asked Dr. Bessey for definite figures as to the proportion of children vaccinated direct from the heifer and those from humanized vaccine. In regard to the absolute immunity of pure lymph he took it that Dr. Hingston meant that the syphilis is conveyed in the formed matter of the blood, and, if conveyed in the red blood corpuscles, why can it not be also carried in the white cells? Now it is a fact that you cannot get lymph without colorless corpuscles; if you take it ever so pure and clear it will be found to contain a few colorless cells, and as it gets older these multiply by taking nourishment from the lymph.

Dr. F. W. Campbell said that the Local Government should be conferred with to have an Order-in-council passed donating the land, and then the Dominion Government should be asked for a grant towards putting up the buildings. He thought it very important that a large stock of animal virus should be always obtainable, and he thought the Society should act with Dr. Bessey in this matter.

In reply, Dr. Bessey, said in the absence of positive records, he should judge that 50 per cent. of the cases were vaccinated from heifer lymph, and the remainder with early removes from healthy children. In reply to Dr. Hingston he held that the serosity of vaccine was quite capable of being the medium for conveying the syphilitic germs, as readily as a pus granule or blood corpuscle; it was as much a secretion of the body as was the saliva, the perspiration, or the seminal fluid, either of which, as has been frequently demonstrated, are capable of transmitting the syphilitic poison.

It was then moved by Dr. Hingston, and seconded by Dr. Campbell, and resolved: "That this Society desires to express its deep appreciation of the necessity that exists for a sufficient supply of reliable bovine vaccine lymph, and expresses its confidence in the purity of the supply afforded by Dr. Bessey during the past few years, and will hail with satisfaction any assistance the Local and General Governments may be pleased to afford in order to secure an efficient supply for the Dominion of Canada.

The matter was then referred to the Council to take action.

Dr. Hingston laid before the Society several "proofs" of a pamphlet now being printed for him, as a note-book on ovarian and other abdominal tumors. He said that those of Spencer Wells and

Hodges were more than complete in the matter of history, but incomplete in what related to diagnosis. While many diseases with which ovarian tumors might be confounded were to be found in the pamphlets of those writers, much had been omitted, and to supply these omissions was the purpose of the pamphlet. Dr. Hingston stated he had followed the arrangement by Hodges, had restored much of what had been omitted from Wells, and had supplemented, chiefly under the head of diagnosis, what was not to be found in the note-books of either.

Progress of Medical Science.

IMPROVED METHOD OF TREATING UTERINE DISPLACEMENTS.

By Robert Bell, M.D.

The peculiar posing of the uterus in the body, the elasticity, or rather yielding nature of its supports, and its dependence upon the health of the neighboring viscera for this support being uniformly maintained, renders it peculiarly liable to displacement. Anything which interferes with circulation in the pelvis will naturally interfere with the health of the womb, and will thus render it more susceptible of disease, and will predispose to malposition. If constipation exists, then the weight of the fæces in the sigmond flexure and the higher reaches of the colon will not only interfere with the free circulation in the pelvis, but will also, by mechanical pressure on the organ, crowd it out of position. If we have an irritable bladder, and in consequence of this the viscus being unable to retain more than a few drams of urine, the straining which accompanies micturition will force the uterus forwards. Another pregnant cause of displacement is dyspepsia, which, causing distention of the intestinal canal, brings undue pressure to bear from above upon the fundus. One more powerful factor has recently been pointed out, viz., the endeavor to obtain greater compass and volume in singing by powerful action of the abdominal muscles, and so forcing downwards all the viscera. It is obvious that any causes such as those enumerated must be removed before local remedies can have the desired effect. It will also be necessary to attend to the health of the canal of the neck and body of the organ at the time the displacement is being tackled, or we will be most certainly disappointed.

I have had this remedy as it now stands in use about two years, and have treated over 200 cases by means of it alone. I have not used a pessary during the past 18 months. Every form and gradation of displacement has come under observation, and in every case great relief was obtained, and in the majority of cases a complete cure was the result. The patient requires to be under careful and patient observation for weeks in every case, and in many instances for months at a time; but surely these are trifling objections. I had used, for years previously, the ordinary glycerine of tannin of the pharmacopœia; but though I found it a most efficacious astringent, yet its expense and the disadvantage of staining the underclothing told very much against it. Had recourse to the following :—Glycerine, 80 oz.; alum, 10 oz.; carbolic acid, 1¼ oz. If a displacement continues for any length of time, hypertrophy of some portion or of the whole organ is the result. We have thus a greater strain thrown upon the uterine supports, so that what at one time was a result becomes a factor in aggravating the disease. Our first duty, then, is to endeavor to reduce the overgrowth, and at the same time prevent its recurrence by rectifying the position of the organ and retaining it *in situ*. When we have a hypertrophied condition of the walls of the uterus, in the majority of instances there is softening of the texture, so that a flabby condition results. In these cases it is a matter of little difficulty to restore the position of the organ, but as soon as the support is removed it falls back into its abnormal position. Moreover, if there exists (which frequently does) any amount of inflammatory action, the presence of a pessary is a most serious source of danger; and besides, supposing there is no danger of an attack of acute metritis, there yet remains the disadvantage that the relief is entirely due to the fact of a mechanical support being retained in the vagina, and which every little while requires to be removed to make way for one of larger size, till in the course of a short time the walls of the vagina become as capacious as the pelvis will admit of; moreover, the woman always retains the disagreeable consciousness that she is wearing an instrument, and there is ever present the danger of the hard pessary injuring the soft parts upon which it is constantly resting. A pessary to be of service must fit accurately, and only long experience and patient care will ensure this result. If it does not apply itself with precision to the parts, it certainly will result in serious mischief. One advantage of my treatment is, that it is rarely necessary to employ either probe or elevator when there is a flexion. This is another prolific source of danger removed.

Prolapse of the uterus : This may vary from a slight lowering of the position of the womb to complete procidentia. It is due either to (1) an increase in weight of the organ ; (2) to faulty action of the supports ; (3) it may arise from pressure from above, or from all these factors combined.

A lacerated perinæum must of course be rectified before treatment. From whatever cause prolapse occurs, there is always, as a result, hypertrophy of the organ and relaxation of the vaginal walls and uterine ligaments. If the uterus, then, is elevated to its normal position, and retained there by a suitable appliance, the hypertrophy will disappear,

and if at the same time we can stimulate the capillary circulation of the parts, and also cause a steady drain to take place of the watery constituents of the blood in the uterus and its neighborhood, we will do much to remove the tendency to the displacement by reducing the size of the organ and simultaneously strengthening its supports. This end is attained most satisfactorily by replacing the prolapsed uterus in its normal position, and retaining it there by a tampon of cotton saturated with the glycerine of alum and carbolic acid, and allowing this to remain in the vagina from 3 to 4 days. The tampon excites an abundant water discharge from the vagina, necessitating the patient constantly to wear a napkin. Glycerine excites this discharge, but when combined with an astringent, the effect is an even more profuse drainage of the watery components of the blood; the effect on the capillary circulation is also intensified, and the astringent effect on the vaginal wall is most beneficial. By this means alone I have completely cured procidentia which existed 3 to 8 years, after above treatment had been persevered in for from 2 to 7 months, and in a few cases where the disease existed for a much greater time very great relief has been experienced after more protracted treatment. If the tampon is merely saturated with glycerine it becomes very offensive after a few hours; when, however, the carbolic acid is added, there is no fœtor at the end of four days, when the tampon may be replaced. We can keep the organ *in situ* for months, and likewise act on it and the neighboring tissues to restore them to a healthy condition, the woman's general condition indicating a marked improvement. I claim for this method of treatment equal advantages with any plastic operation that may be performed upon the vaginal walls; and there is this, that the uterus itself also probably partakes of benefits which an operation on the vaginal walls cannot confer.

Versions and flexions of the uterus: I have treated quite a number of cases which had been subjected to the general routine of pessaries and stems without deriving any benefit whatever, and which have, after a few applications of the tampon, expressed themselves as feeling great relief. It may perhaps be interesting to give one case. This lady had been suffering from retroflexion of the uterus for six years, which was aggravated very much by obstinate constipation, but this symptom had been quite overlooked. She was a most miserable-looking object, with an ashy complexion, which, however, was partly attributable to the absorption of fœtid matter from fæcal accumulations in the rectum and colon, as when these masses were removed and kept from accumulating, her complexion improved, and she felt somewhat relieved in every way. Yet the least exertion completely prostrated her, and the dysmenorrhœa was most intense. For six years she had been under treatment by means of pessaries and stems of all descriptions, from solid silver stems down to pessaries made of gutta-percha covering copper wire, and with no benefit; in fact, she was daily getting worse. In this case I used *two* tampons saturated with the solution, one much smaller than the other, so that it would occupy a position supporting the fundus, well up in Douglas's pouch, while the other and larger tampon was placed behind the cervix, and acted as a support to the smaller. After three months she was able to endure considerable fatigue, and eat and digest satisfactorily, and sleep well, feats she could not perform before; and at this moment I know she enjoys life thoroughly.

I think it often a good plan to employ two tampons in retroflexion and also in anteflexion, but, as a rule, one answers all the purpose. It is gratifying to observe the speedy effect of this treatment on the bladder symptoms in anteversion and anteflexion. I think I need hardly enter into further details as to the method of treating other varieties of displacements.—*Edinburgh Med. Jour.*

THE TREATMENT OF STRAINS AND SPRAINS BY COLLODION.

By A. N. Blodgett, M.D.

Physicians are called upon to treat a great number of injuries to the joints in which there is no discoverable fracture or dislocation, but which are considered to be partial dislocations of the less mobile articulations, accompanied by more or less extensive rupture or laceration of the ligaments about the articulating surfaces, with some degree of effusion into the cavity of the joint, and often a very considerable amount of hemorrhage and suggillation in the neighboring soft tissues. The nature of the injury makes its recovery a gradual process, the tissues involved are often those in which reparative operations are carried on slowly; the external swelling and the effusion into the articulating cavities are both mechanical hindrances to recovery, so that healing of the lesion can hardly be looked for until they have subsided. Added to this is the fact that the most frequent seat of this class of injuries is some joint in the articulations of the ankle or foot, and we have in the location of the accident, perhaps, the most important obstacle to a speedy recovery from the injury. There are but few persons who so completely follow advice as to grant the injured limb freedom from use, for most people will persist in a certain amount of walking with the injured foot under any circumstances. It is often impossible to convince the patient that it is necessary to favor a *strained* joint for the same reason that it is necessary in a dislocated one. Oftentimes the difference between a strain and a dislocation is simply one of degree.

In the winter of 1878 I sprained my own ankle, and within the usual time found the parts all about much swollen, the pain considerable, and disability nearly complete. I tried to adjust a bandage, but

succeeded only indifferently well, for at the best it would not do what was necessary, and was not easy to retain in place. Treatment by evaporating lotions was so troublesome to me that I soon discontinued all measures of that sort.

I was resigning myself to let the sprain take care of itself, when it occurred to me that the application of collodion, so prepared that it would contract in drying, might be of some service. I made the trial, and was surprised and pleased at the result. For a few minutes no appreciable effect seem to follow, but after several coatings there commenced a contraction of the whole layer of collodion from all directions at once, to a much greater degree and in a much more efficient manner than any bandage could possibly effect. The contractile power of the collodion was so great that it seemed as if it would divide the skin at the border of the film. Some of the hairs around the ankle were accidentally included in the collodion film, and were so violently pulled upon that several of them were actually drawn out of the skin. The discomfort attending the contraction of the collodion subsided in a short time, and gave way to a feeling of coolness in the ankle and relief from the pain. The skin became drawn into wrinkles in all possible directions, with a positive and marked diminution in the measurements of the ankle, due to the decrease in the effusion in and about the injured part. After some hours the collodion film cracked in many directions, thus becoming divided into small scales, which I picked off. The skin was not in the least irritated or inflamed by the application. Another fresh coating consisting of several layers of collodion was at once applied before putting the foot to the floor, and the same powerful contraction and a similar diminution of the swelling was effected as at first. In the short space of three days the ankle was restored to its original size, and there was a total absence of pain and tenderness in the joint. I was able to walk without pain, unless the foot was set upon some inequality in the ground, when the strained place of course became painful. In a week I found myself quite well, and have never had a relapse, which I consider the more remarkable as I am not particularly careful, and am upon my feet a great deal.

[Here Dr. Blodgett cites eight cases successfully treated by collodion.]

The uniform result which followed the use of contractile collodion in these few cases seems to me a sufficient reason for desiring to call the attention of the profession to this method of treating strains and sprains, particularly in and about the ankle. These cases may be supposed to represent the majority of such injuries as they present themselves in daily practice, and I consider them without doubt to be such as would otherwise have been a source of trouble for weeks, as is usual under ordinary conditions. The treatment by contractile collodion greatly accelerated the recovery, besides restoring to the injured parts an almost perfect immunity from relapse, which is the exception in the healing of strains and sprains.

I do not remember ever to have heard of the use of contractile collodion in the treatment of sprains, and I have never known of its being employed by any person for this purpose previous to the injury which I sustained in my own ankle. This was my first experience in its use, and the result was so satisfactory that I have employed it in all appropriate cases occurring in my practice since that time. In each case its action has caused great surprise to the patient, and the treatment thus far is perfectly satisfactory. I do not know any objection to its use, either from its composition or from its retracting power. It seldom causes any irritation of the skin, it does not interfere with the circulation, it never endangers sloughing. The fact seemed to me quite remarkable that, although the contraction was very powerful around the ankle, there was never any puffiness or swelling about the toes or any part beyond the ankle. I do not think a bandage could possibly be applied so as to exercise a similar compression upon the parts beneath without occasioning swelling of the parts beyond the bandage.

The adaptability of this mode of treatment to cases requiring the application of cooling or evaporating lotions is also of great advantage. The refrigerant is applied directly to the points where such an action is most desirable, and exercises its full force in the way of reducing the temperature of the part, and yet it does not absolutely *touch* the skin. The result of the protection to the skin is, that the effect of a *dry* cold is obtained instead of a *wet, chilling* cold. The skin does not become macerated and soggy from the action of the cold application, and the sensation of the patient is much more comfortable, not to say agreeable, than from the *contact* of a refrigerating application. Indeed, the film of collodion is so admirable a conductor of heat that I have seen the temperature in a sprained ankle become reduced from this alone, when I am convinced that without the collodion film an evaporating lotion would have been indispensable in the local treatment of the injury. The skin is not thickly covered as by a bandage, but a thin transparent film is spread evenly over its surface, through which every symptom in the injured part can be distinctly and clearly recognized and every shade of color in the skin be plainly discerned. After some hours the film already applied becomes cracked in the lines of its wrinkles, when it may be easily peeled off and a new film immediately applied to the same spot, by which all the benefit of a new, fresh compression of the parts is at once obtained.

The treatment may be continued indefinitely. Before applying the collodion it is advisable to gently wash the part to be treated with soap, in order to remove any oily or greasy matter from the skin. These substances might decompose beneath the film and irritate the skin, and they might also prevent the collodion from adhering perfectly in

every part. It is desirable to avoid both these contingencies, and for these reasons I always wash the ankle and dry it carefully by pressing a towel upon it *without rubbing*, by which the moisture can be completely removed, when the collodion may be at once applied. Each additional coat of collodion strengthens the layers already applied, thus acting with a cumulative power in compressing the part and reducing effusion about the seat of injury.

Among the advantages of this mode of treatment are, briefly, prolonged elastic compression in parts notoriously difficult to bandage properly; waterproof protection to the skin from external irritants or applications; hermetical sealing up of wounds in the region of the strain or sprain; constant access to the part without the removal of dressings; an uninterrupted view of every part of the injured limb; reduction of heat in the tissues; great acceleration of the process of healing with perfect restoration of function; a great degree of immunity from relapse; and absolute simplicity in application.

So far as my limited experience warrants an opinion of collodion in the treatment of strains and sprains, I am inclined to consider it by far the best, simplest, and most satisfactory method I have ever known, and I am confident that others will obtain equally pleasurable results in similar cases. I think it more than probable that collodion may prove valuable in the treatment of certain other diseased conditions, upon which I trust to be able to communicate some observations at a future time. The degree of contraction depends much upon the quality of collodion employed. There is a *flexible* collodion which contains castor oil; this does not contract at all, or but very slightly, and will not do the work. The so-called "*contractile* collodion" must be employed for this purpose. It yields uniform and satisfactory results, and is quite durable. It is very volatile, and should be kept stoppered, and when being used the finger should be tightly applied to the mouth of the bottle. It is also liable to explode, from the ether it contains, if brought too near a flame, but is fully as safe as ether, and we all use this agent by day or by night without accident.

To obtain the contractile effect of collodion it is necessary to apply several coats successively, one upon the other. I think I have never applied less than six layers, which is easily accomplished, as the collodion dries very quickly, and a second coat can be applied almost as soon as the first is finished. If for any reason it should become desirable to remove that which has been applied, this can readily be done by means of a small quantity of ether, which dissolves the collodion with great readiness. This will hardly be necessary, as the collodion, even if applied to a part where it were not required, causes at most only a slight inconvenience, but no great pain, and is not productive of dangerous results.—*Boston Medical and Surgical Journal.*

CAPILLARY BRONCHITIS.

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I propose to confine our attention to the acute form of bronchitis, as it prevails through the period between earliest infancy and the fifth year of age. In this form and during this period of life, whether we regard the frequency of occurrence, the important structures involved, or the intensity of suffering and the degree of danger which it may attain, acute bronchitis claims an importance second to no other disease of childhood, and its earliest symptoms should be watched with great care. The most common termination of cold thus contracted is favorable, and the conservative powers of the system may prove adequate to carry the little invalid safely through, notwithstanding neglect, and without the aid of medicine; but the wiser course is to watch these milder symptoms, lest they become more serious, and we have to apprehend those results which sometimes follow the extension of inflammation from its most common situation in the larger bronchial tubes to their capillary extremities, and thus involve the lobules and air vesicles of the lungs.

Acute bronchitis may be primary or idiopathic, or secondary, such as occurs in the exanthemata and certain blood diseases. Mechanical, as by minerals, etc.; and epidemic, as in influenza and catarrhal fevers, etc.

The *rational symptoms* are sometimes preceded by irritation or inflammation of the lining membrane of the nose, larynx, pharynx, trachea, successively, the bronchial tubes sooner or later taking on inflammatory action; or these tubes may become at once inflamed without such continuity with the surfaces above. Symptoms of invasion may be observed, such as languor and general debility, morbid sensitiveness to temperature, muscular pains about the head, back, and limbs.

The *local symptoms*, after the period of invasion has passed over, become more or less intense, as sensations of burning or soreness on inspiration behind the sternum and along the sides, headache—general or frontal—becomes more acute, etc. The dyspnœa, not always distressing at first, becomes more oppressive later in the attack—this symptom being more grave in the child at the breast, because of the difficulty in receiving food, and is aggravated when there is coincident irritation of the nostrils with free secretion. Cough is not painful, but always a prominent symptom. This, at first, is dry and hoarse, until the second or third day, when the mucous secretion is established, which is at first thin, transparent, and more or less frothy, but soon becomes somewhat viscid and tenacious, assuming changes in color—yellowish or greenish. This becomes in a few days of an opaque, muco-purulent character, mixed with epithelial cells, ciliated cells, and sometimes with blood. These changes in secretion are difficult to

observe in children under five years old, who do not expectorate; but the matter may be caught or noticed if ejected from the stomach by vomiting. In mild cases the temperature is but little higher than normal, and in quite severe attacks does not rise so high as in pneumonia—102 F. being quite high for bronchitis. This feature of temperature is important in making out the diagnosis between bronchitis and pneumonia, and also some of the exanthemata before those are well developed. The attending fever is remittent, the paroxysms being higher in the evening and early night. The functions of digestion are generally effected, the secretions being suppressed, the appetite impaired and the bowels constipated. The skin is easily kept moist by warmth and diaphoretics. The *tongue* is moist in the milder cases, with moderate coating of white fur. *Thirst* is generally well marked. Nausea not often occurs. The secretion of urine is diminished in quantity somewhat, in accordance with the severity of attack, and in a varying degree is colored by the urates. The respiration is, in moderate cases, always more frequent, reaching thirty-five per minute, but varies with the degree of violence and character of the tubes involved, until, in the capillary form, it is attended with alarming anxiety, and is only accomplished with great labor.

This capillary form may come on at once, but generally succeeds the ordinary acute form. Besides the difficulty of respiration, this is recognized by signs of obstructed circulation—the imperfect decarbonization of blood causing darkness and lividity of complexion. In the onset of inflammation of the capillary vessels, we have pyrexia, but a very high temperature is not reached, perhaps 102° F. The rapidity of circulation and respiration is very great. The pulsations are as rapid as 150 a minute, while the respirations are 50 or 60 or 70 or even 100 in the same period. The warmth of surface becomes abated; and, if the condition proves progressive, coldness of the extremities and face with increasing cyanosis, is soon accompanied by a change in the child's manner —restlessness giving way to indifference, and sleeplessness to drowsiness; this running into stupor, with still shorter respirations and more rapid, feeble pulsations, with convulsions to close the scene.

Broncho-pneumonia.—Lobular pneumonia may occur in the course of acute bronchitis, and particularly if it assumes the capillary form—the clusters of collapsed lobules, with their connective tissue, becoming involved in inflammation. The condition is better expressed by the term *broncho-pneumonia*, as it includes a variable condition of bronchitis and vesicular pneumonia. The pneumonic consolidation exists in nodules the size of a pea and larger, scattered about through tracks of air containing tissue, which coalesce to form larger tracks. It will be found to prevail simultaneously in both lungs. It is more likely to be developed in that kind of capillary bronchitis which attends influenza, measles, whooping-cough, etc.

When inflammation in this way extends to the parenchyma of the lungs, the most prominent symptom, perhaps, is the increase of temperature, as in lobar pneumonia, reaching very soon 104° or 105° F. There is observed also less regularity and remission in the paroxysms of fever. The rapidity of respiration is increased, and becomes as frequent as 100 and more per minute, the action of accessory muscles in respiration being violent, raising up the superior chest, while the diaphragm draws in the lower portion. The action of the alæ nasi is conspicuous. The cough becomes more painful.

The secretion from the bronchial tubes is diminished, and, if it can be examined, will be found to be more tenacious and rusty-colored, or containing streaks of blood. The power necessary for inspiration and expiration is comparatively less in the child than in the adult, in consequence of the soft and yielding character of the bony structure of the chest. It follows that in bronco-pneumonia, as in capillary bronchitis with collapse, the muscular strength is sooner exhausted, when mechanical obstacles impede respiration.

Physical signs and diagnosis.—The *anatomical changes* which are of most importance in acute bronchitis, in respect to the physical signs are thickening and swelling of the walls of the bronchial tubes, the liquids contained in these tubes, the quantity of liquid present, and the obstruction afforded to the removal of such liquids.

As a general rule, resonance on percussion is little affected in cases of ordinary degree of extent. Auscultation reveals at first only dry sounds, the sibilant and sonorous râles being heard singly or simultaneously over the chest, according to the extent and portions of the tubes involved, the tenacity and quantity of the liquid adhering to the tubes, and the thickening and diminished calibre of the same. These dry râles cannot be too much relied upon in diagnosis, as they may arise from spasm of the same tubes, as occurs in asthma. When, in a few days, the secretion from the mucous coat is well established, these dry sounds in bronchitis are mixed up or superseded by other *râles*, which are moist or bubbling. These moist râles also vary, according to the size of the tubes, the density of liquids and amount contained, being coarser in the larger tubes and finer in the smaller bronchial branches. The finest of these moist râles concerned in bronchitis is that called the *subcrepitant*, which has its origin in the smaller ramifications of the tubes before entering the lobules. This subcrepitant râle is the nearest approach to the *crepitant* râle, which takes place in the vesicles themselves, and is caused by the separation of their walls on inspiration.

The moist sounds, like the dry, may fail in differential diagnosis, as they may originate in other liquids than mucus, as from *blood*, serum, etc. The subcrepitant râle indicates the presence

of liquid in the finer bronchial tubes, but is not confined to bronchitis, occurring also in pneumonia, in œdema of the lungs, in phthisis and pulmonary apoplexy. In bronchitis the liquid which causes the subcrepitant sound is mucus; and, like all the other râles, dry and moist, is heard, in bronchitis, on both sides of the chest, when it is primary or idiopathic. Importance is due to the location in which these several sounds are heard. If confined to the middle third of the lung, it may be inferred that the larger tubes are involved; if to the upper and lower third, that the smaller tubes are also engaged. The respiratory murmur may be occasionally obscured, and renewed, after coughing, by the removal of obstructing mucus. Resonance, on percussion, enables us to distinguish *bronchitis* from *pneumonia* and *pleurisy*, as flatness attends both of the latter on one or both sides. In pneumonia we have the crepitant râle and dull pain in the affected side. In pleurisy, we have sharp pain, and also the friction sounds. Between pneumonia and the capillary form, we may distinguish the crepitant râle of the former, on inspiration, from the subcrepitant, which is common to the expirating and the inspirating act.

Pneumonia is ushered in by a severe chill; the temperature, after reaction, is much higher; the cough is not so sharp and frequent; expectorated matter is rusty-colored; redness of the cheek is characteristic, and there is not the cyanotic hue, In pneumonia, on physical examination, besides dullness, we find increased vocal resonance and fremitus and bronchial or tubular respiration. Bronchitis may so resemble whooping-cough, that, for the first three weeks, it may be hard to make out a differential diagnosis. The means which may avail consist in the sudden paroxysms of cough, with readiness to vomit; flushing and swelling of face during the paroxysms of cough, until the characteristic whoop will decide. Diagnosis is the more difficult between these two, because bronchitis is so constantly attendant upon whooping-cough, to some degree, in the beginning.

Morbid anatomy. A variable degree of redness, according to the degree of severity and extension of the attack, is observed over the mucous membrane. This is not so often seen in the smaller tubes as in those of larger and medium size. Thickening and softening of the walls of the tubes is found with a deposit of muco-purulent secretion. After severe and protracted attacks, the tubes are dilated somewhat irregularly, representing cavities or sacs of various dimensions.

If broncho-pneumonia has been developed, we find hard patches of lung of red or gray color, corresponding with the lobules and terminating branches of particular bronchial tubes, these patches having so coalesced as to make spaces so large as to resemble lobar-pneumonia. They contain *pus*, distributed through the affected parts in soft and yellow spots. When pulmonary collapse has only occurred, the condition is different. In pulmonary collapse the vesicles have been cut off from access of the air by contraction of the thickening bronchial tubes, and by fluids in excessive quantity, or by adhesive lumps of partly inspissated matter in the smaller branches, until the residual air, being entirely exhausted in them, their walls have fallen together. The lobules containing the air vesicles are found shrunken in dimensions, violet colored, and heavy; so that, when detached from the healthy tissue, they sink in water. The pleura covering these is healthy. If air is forced into the bronchial tubes leading to such lobular mass, they become promptly distended, and resume their dimensions and relations to the adjoining tissue. The posterior surfaces of the lobes and their margins, being the most remote from the centre of the lungs, are found to be the situation in which most collapse has taken place.

Prognosis. Primary, simple bronchitis is comparatively free from danger, if not neglected, even in very young infants. In this form, and in the secondary forms, the mildest case may resist all treatment; and the patient may become embarrassed with apneumatosis, and the dangers which result from capillary inflammation, collapse of lobules, or from broncho-pneumonia. Delicacy of constitution and epidemic influences may contribute to this result. The irritability of system, during the period of dentition, may also lend unfavorable influences. The character of primary diseases, which become complicated with bronchitis, will also help to determine the extent and severity of its effects. Every symptom diagnostic of collapse or lobular pneumonia is unfavorable.

Treatment. In the milder forms of bronchitis a strict adherence to suitable hygienic measures will most frequently comprise all the treatment necessary to avert danger, but a compliance with such course cannot often be obtained. Strict confinement to the cradle or the bed should be the rule. The air and temperature of the apartment is of great importance. The purity of air should be carefully regarded and proper ventilation secured. Dryness of air, where stoves are used, can be avoided by means of the evaporation of water. A temperature ranging from 65° to 70° should be maintained. The cradle or bed and bed-clothes should be made to correspond with the object of perfect comfort, and as much uniformity of temperature as possible. The diet should be simple and digestible, the mother's milk, in such as are at the breast, being the standard. When active treatment becomes necessary this should be subordinate to the degree of inflammation, the febrile action, the strength of constitution, the idiosyncracies of the patient, and the relations which the attack may bear to those disorders which it may accompany. When ushered in by symptoms resembling croup an emetic of ipecac is always proper. After the action of this the relaxing expectorants are to be carefully adapted to the establishment of secretion along the bronchial tubes.

The warm bath will promote diaphoresis, reduce

febrile heat, compose the nervous system, and equalize the circulation. The warm foot-bath, throughout every stage, is valuable, and may be improved sometimes by the addition of mustard. As expectorants in the early stages, ipecac and squills, in the form of syrups, are often found suitable. Senega, in syrup or by infusion with liquorice, may be chosen in some cases. Along with these demulcent infusions, as those of flaxseed, slippery elm, the bene leaf, etc., will be good adjuvants and serve to allay thirst, which is always more or less urgent. Small doses of the syrups mentioned, either alone or combined, may be given at intervals of two hours, according to the urgency of symptoms and the tolerance of the child. In the very young and delicate infant it is best to avoid making undue impression with even such mild agents, when the administration is left to anxious friends or unskillful nurses. We think tartar emetic unsafe, except in cases of great inflammatory action, and with the expectation of its use for only a limited time, and under the sanction of the physician. This precaution in the use of depressing agents is necessary throughout the course of this disease, but more particularly in the infant and in the advanced stages. In following out plain indications which may be present at the time of our visit, to subdue excessive arterial action, we may overlook one principal feature in the character of bronchitis in children—that unfavorable terminations are most apt to occur in connection with debility. With the mild expectorants and diaphoretics, early in this affection, opium in some form may be proper. If feverish condition is obstinately kept up, with evidence of progress in the extent of inflammation, within the first few days, we have a more safe antiphlogistic remedy than tartar emetic in the combination of calomel with ipecac or Dover's powder. We prefer these when the paroxysms of fever are strong, the tongue furred, the skin unusually warm, the cough dry and attended with pain, and when the milder remedies have failed. The condition of the bowels, the degree of pain and of restlessness will govern us in deciding between the ipecac and Dover's powder. To a child two years old, half a grain of calomel may be given, in combination with one of the other medicines in corresponding dose, every two hours until the amount of a purgative dose has been taken. After satisfactory action on the secretions by the calomel, if feverish symptoms continue, the expectorants before mentioned may be used, with the addition of bicarbonate of potash. For example, for a child two years old:

℞. Potass. bicarbonat..... ℈ij.
Syr. scillæ simp.....
Syr. ipecac.....aa f℥ j.
Spirit. ether nitroc..... f℥ ss.
Syr. acaciæ..... f℥ ss.
Aq. distillat. q. s. ad..... f℥ iij.

M. S.—One teaspoonful every two hours.

We attach much importance to the use of bicarbonate of potash during the feverish stages. If the state of the skin, the temperature, the pulse and respiration show no abatement of symptoms, there may be added to each dose of the above mixture one drop of tincture of veratrum viride until its influence has been observed on the frequency of the pulse. We have found the veratrum viride to be the most safe and sure sedative to diminish the action of the heart in bronchitis and pneumonia. The attending fever is remittent, and paroxysms are periodical, being more so when malarial influences abound and when catarrhal fevers prevail.

This circumstance is suggestive of quinine. But, although we do regard this therapeutical application of quinine, we do not limit its influence to that of a simple antiperiodic, nor to that of an antipyretic. We think, through its action on the vasomotor nerves, it lessens the tendency to congestion, which inclines to the development of capillary bronchitis and broncho-pneumonia. Quinine proves antagonistic to malarial influences, which keep up fever and add to the general debility. It may be given to the amount of several grains each day, in broken doses, along with the other remedies—diaphoretics and expectorants—the latter being withdrawn when contra-indicated. The quinine may be either continued alone to favor convalescence, or we conjoin it under other circumstances with carbonate of ammonia or senega to promote expectoration of secretion too freely established. Bronchitis may require care such as we have detailed for one week or for a fortnight without dangerous symptoms threatening, and, in secondary cases, longer, according to prior affection.

We have had care in regard to the liability, at any time, to the occurrence of the capillary form, and to lobular pneumonia. As soon as treatment is first indicated, we advise mild rubefacients to the surface of the chest, and continue them, in varied forms, according to indications, using "camphor liniment" with flannel, and this with variable proportions of spirits turpentine or the aqua ammonia. As soon, in the progress of the complaint, as we see symptoms suggestive of unsafe degree of congestion or collapse, we prefer fermentations to the chest. Flaxseed or other poultices, or flannels wrung out of warm water, spongio piline, etc., all covered with oiled silk, and kept in position carefully with a bandage. Our favorite mode is in the corn-meal mush, made of proper consistence by boiling, and spread on and enveloped in linen, and bound in the bandage carefully around the chest. To the mush thus applied is added red pepper or mustard in small proportions, say one teaspoonful of either one to a four-ounce cupful of the poultice, this being intended to gently stimulate the exhalants to increased action, and maintain capillary circulation on the surface. We do not approve of blisters, except under peculiar circumstances, and then only to rouse up reaction when other means have failed.

When collapse of the air vessels has taken place, and the circulation is feeble, the skin pale and cool, the difficulty of breathing extreme and asphyxia threatened, and the case is desperate, without quick aid from new resources, we would look to oxygen gas with great hope. It has been suggested that an increase of oxygen in the air might be affected by burning chlorate of potash on live coals in the room with the patient, but a more satisfactory mode would be to manufacture the pure gas, and administer by means of a gas bag. The imperfect decarbonization of the blood may thus be corrected until other means can be brought to bear favorably on the chances of the patient's life. In more ordinary cases of bronchitis the inhalation of atomized fluids has been found convenient and useful. The vapor of water alone is often beneficial. This may be practised by means of a tin tube extending from the boiling kettle to the cradle of the patient.

Water, holding in solution those medicines which promote expectoration, or which render the vapor more agreeable, may be used by means of an atomizer. Benzoin, carbolic acid, tolu, vinegar, muriate of ammonia, etc., have been used to great advantage.—*Virginia Medical Monthly.*

INTESTINAL OBSTRUCTION OF TWENTY-ONE DAYS' STANDING RELIEVED BY CARBONIC-ACID-GAS INJECTIONS.

Dr. Heustis, of Mobile, reports this remarkable case in the *Medical News* of June 3d. It is of great practical interest.

After a tedious labour, attended by an extensive perineal laceration, and followed by puerperal fever lasting three weeks, a severe colic attacked the patient. Anodynes relieved the pain, and after this various cathartics were ineffectually given; likewise enemata. Obstinate emesis came on, and on the second day stercoraceous vomiting occurred. Dr. Heustis continues as follows:

Seeing that it was a case of ileus, calomel and opium were given regularly (calomel, two and a half grains; opium, one grain) every two hours; but the opium had to be increased to two and a half grains, and sometimes given every hour when the distress was great. Warm poultices were kept on the belly, and large injections of soap and water, or ox-gall and water were used every day. The opium appearing to be too slow in its effect, a grain of morphia was substituted, and a quarter of a grain of extract of belladonna, with the *two and a half grains of calomel*, which was kept up every two hours while awake. She would generally get a little sleep at night, but was hardly ever free from pain, and almost every day a large quantity of stercoraceous matter was vomited. Notwithstanding this, the expression of countenance remained good and the belly soft. Before the coming on of an attack of stercoraceous vomiting there would be a rumbling of the bowels; but instead of causing a desire to go to stool, there would be a reversed action and then the horrible vomiting.

No spot could be located as the seat of the obstruction; and though the same train of symptoms continued from day to day, the last resort of making an exploratory opening of the abdomen was postponed. Her dozen pills (of *thirty grains of calomel*, twelve of morphia, and three of belladonna extract) would last two or three days, sometimes not so long; but there was no appearance whatever of salivation.

On the seventeenth day it was determined to make an exploratory incision into the abdomen, but the gentlemen to assist could not be got together, and it was deferred until next day. Next morning her pulse and countenance were good, belly soft, free from any swelling; and the operation was deferred. Large injections containing ox-gall were forced through an india-rubber tube, eighteen inches up the rectum and colon, with a stomach pump, but nothing but the injection would come away. Quantities of melted lard were tried in the same manner, with the same result.

Having read of carbonic acid gas succeeding in such cases, I had the husband get one of the large siphon bottles, sold as seltzer water, fasten the India-rubber tube tightly on the spout, and after oiling it well and passing it far up into the bowel, turn on the seltzer. He did so in my absence, and when I saw her in the morning she declared that the gas came out of her mouth; she was sure of it for she tasted it distinctly. Still her bowels did not act, and she had another attack of stercoraceous vomiting next morning.

Her husband having got another quart bottle of seltzer I attended to the administration of it, passing the tube about eighteen inches up the bowel before turning on the gas. It made an noise like escaping steam as it passed into the bowels, and before the bottle was half empty the feces began to flow out; and when the flow stopped, the gas was turned on again, to be interrupted by more feces; and so it was kept up until the bottle was empty, and the bowels too, apparently, from the quantity passed.

After that her bowels acted every day, and she had no further trouble with them.

As the exact seat of the obstruction could not be ascertained, its cause remained doubtful. Possibly a band of adhesive lymph resulting from the recent attack of peritonitis might have pinched the bowel; but in such a case there would probably have been swelling and tension of the abdomen. In the absence of positive signs, it will be reasonable to assign a spasmodic contraction of the bowel as the cause; but why it should have continued so long, and not be relieved by such large quantities of morphia, is a mystery.

The elastic and pervading force of carbonic acid gas thrown far up into the colon would appear to be the readiest and best means of overcoming such obstructions.

AN OBSTETRICAL PHENOMENON.—CRYING OF THE FETUS IN UTERO.

By A. Harlow, M.D., Detroit, Mich.

The following case is sufficiently striking, I think, to warrant its publication, even at the risk of having my veracity called in question by doubting Thomases.

The lady to whom I was called moved in the humbler walks of life, and was about forty years of age and in her fifth confinement, eleven years having intervened since giving birth to her fourth child. I would state for reasons that may be apparent to the reader before closing this note, that another physician, one of high respectability and standing, had been previously called, but prior engagements preventing his attendance in time, I was summoned in his stead. Soon after my arrival, finding her pains rapidly increasing in severity and frequency, in absence of all female assistance, I helped my patient upon her seat, and from digital examination found the waters just gathering, and after one or two additional pains the membrane broke and the amniotic fluid quite flooded the bed. I had no difficulty in satisfactorily diagnosing the position, which I found to be a vertex presentation of the sixth variety, according to Baudelocque. Immediately after I had thus satisfied myself as to the nature and character of the presentation and before the labor had further progressed, and while the head was yet engaged in the superior strait, the child made two distinct audible screams that could be plainly heard in any part of the room. When this cry was first heard I was alone with the sick woman, and being greatly surprised at what I heard, gently passed my hand up the vagina and found the head still in the superior strait. Immediately following this cry of the fœtus there was another free discharge of amniotic fluid. During the space of an hour or more before the arrival of female help to assist me, I made several ineffectual attempts to disengage from its fixed position, that it might be forced down the passage by the same uterine contractions that were regularly taking place, but with all my efforts and the assistance of nature, did not succeed in getting any descent of the head, and during this time the child had several spells of crying, the same as was heard at first, the tone and voice being unmistakably that of a child. Two or three elderly women coming in to sympathize and assist, as is usual on such occasions, I made little or no further attempts for one or two hours of hurrying on the labor. Satisfied there was no danger in the case, I did little but watch and wait for a time, to see what rest and nature would do where art and officiousness had apparently failed. During this apparent lull the pains didnot entirely cease; and generally following each one the child would cry as before. At the first cry after the arrival of female help one old lady exclaimed in her joy:

"La me! the child is born."

"No, madam, the child is not born."

"You don't say, Doctor, that the child is not born, and crying, too?"

"Yes, madam, it has had spells ever since my arrival the same as you have just heard."

"Dear me!" was the exclamation of the good woman, and as soon as she could take a long breath, said, "and is not that strange?" and as a mark of veneration settled the matter by declaring that "with God there is nothing impossible."

Waiting as long as I thought it justifiable for the ineffectual contractions to disengage the head from its impacted position, I applied the forceps, and with suitable traction, accompanied with one or two good pains, delivered the woman of a large female child.

I saw my patient next day, and found her very comfortable and apparently doing well; her pulse was normal, no unusual heat or tenderness across abdomen, and was free from all pain. Finding her alone on this my second visit, and in a mood and condition for conversation, I took occasion to investigate her more fully relative to this curious phenomenon. She told me "the child first commenced crying four weeks before it was born, and kept it up at intervals till its birth, since which time it has not cried at all." This lady declared and persisted that she went four weeks over her regular time; that at the proper period for the birth of the child it commenced crying and kicking, as though, to use her own language, "it would come right through her ribs." At first, she said, she was greatly surprised and alarmed, but as this peculiar freak of nature continued without producing any particularly alarming symptoms, she became so accustomed to its frequent repetition that her alarm vanished. After many thanks from my patient for bringing her so safely through her perilous condition, I left after prescribing her favorite opening medicine, which she informed me on such occasions was castor oil, a little to be taken that evening at 9 o'clock, and if need be repeated next morning.

The following day I called according to promise, expecting to dismiss my patient from further medical attendance as intimated the day before; but to my surprise on calling according to appointment, found another doctor present, an occurrence, whether agreeable or otherwise, not altogether unknown to the medical profession. I learned that the woman had taken the oil as I directed the night before. About 1 o'clock a.m. she was taken with a pain in her stomach, and claiming that there was no messenger at hand who knew where I could be found in the night, sent for the gentleman I found present at his second visit. I was told that the woman had not only had no operation from the oil, but that medicine had been given to prevent any movement of the bowels. Without expressing myself pleased or displeased at the course taken, I left the patient in the hands of the physician first called, who could not attend in time to render relief. And

now, having no criticisms to make or animosity to gratify, I will only add that the lady died the next day. The child is living and doing well.

Deeming the above case an anomaly in obstetirical practice, having been an accoucheur for forty-six years without ever having met with one like it before, I have thought best to make a brief but truthful statement of the leading facts and circumstances.

To any doubting the facts stated, I can only say that I have reported my case accurately and truthfully in every particular, which I know to be so from personal knowledge.

[We have only to add by way of comment on the above that Dr. Harlow is well known to the profession of this city, and unless he was himself greatly deceived, which he assures was impossible under the circumstances, we here have a case which is, we believe, usually regarded as an impossible occurrence. Those who know Dr. Harlow will certainly not call his veracity into question.—Ed. *Mich. Med. News.*]

THE CANADA MEDICAL RECORD,

A Monthly Journal of Medicine and Surgery.

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SUBSCRIPTION TWO DOLLARS PER ANNUM.

All communications and Exchanges must be addressed to the Editors, Drawer 356, Post Office, Montreal.

MONTREAL, NOVEMBER, 1882.

OBITUARY.

The Late Aaron Hart David, M.D., Edin., L.R.C.S.E., D.C.L.

It is with deep sorrow that we have to announce the death of Aaron Hart David, M.D. Edin. L.R.C.S.E., D.C.L., Emeritus Professor of the Practice of Medicine and Dean of the Faculty of Medicine of the University of Bishop's College, which took place on the 5th of November, after a painful illness, extending over two years. In the summer of 1880 Dr. David, owing to failing health, resigned his chair of Practice of Medicine, and was elected Emeritus Professor, Dr. F. W. Campbell being appointed to the vacant chair. Owing to Dr. Campbell's having to visit Europe, Dr. David undertook to lecture the first half of the session of 1880-81, but he had hardly commenced his course, when it became evident that he was not equal to the task. With a determination and pluck thoroughly characteristic of the man he stuck manfully to his work until Dr. Campbell's return, and on the 15th of November, 1880, gave his last lecture, Dr. Campbell entering upon his duties the following day. A few days subsequently a consultation of his medical friends was held, and the melancholy duty devolved upon them of informing him that he was suffering from cancer of the bowel about the sigmoid flexure, which diagnosis was confirmed by *Post Mortem*. The prognosis was guarded—but few thought to see his life extended full two years. During most of the time he was confined to the house, and was assiduously watched over by his professional friends, whose frequent calls made the tedium of his illness at least shorn of some of its trials. Several of his most intimate medical friends never, during all his illness, missed spending an hour or more with him every Sunday afternoon; and upon those occasions, from the abundant store-house of his knowledge, he gave out much that was interesting and important of the Medical history of Montreal since 1830. These meetings will, we believe, remain green in the memory of those who took part in them, so long as their life lasts. In August last he was obliged to take to bed, to which he was all but constantly confined till death closed his sufferings. Dr. David was born in Montreal on the 9th of October, 1812, and was the son of the late Samuel David, a retired merchant, who was Major in the 42nd Batt. Canadian Militia, and served with it during the war of 1812 with the United States—receiving the war medal. After getting a liberal education he was, in January, 1829, indentured, as was then required by law, to Dr. William Caldwell; and in the fall of the year he entered as a student of Medicine in the Medical Faculty of McGill College—then opening its first session. But four gentlemen of the class of that year still survive. In 1833 Dr. David proceeded to Edinburgh, and in 1835 he graduated at the University of Edinburgh, being 24th in honors in a class of 117 graduates. His Thesis was on "The Medico-Legal Proof of Infanticide."

After travelling a short time on the continent, Dr. David returned to his native city, and commenced the practice of his profession, marrying in the following year (1836). During the years 1837-9, Dr. David was assistant-surgeon of the "Montreal Rifles," and with it he served during the whole of the rebellion, being present with his regiment at the battle of St. Eustache.

In the year 1841 he removed with his family to the town of Three Rivers, where he soon got into a large and lucrative practice. It was while an honored resident of that town that Dr. David was several times requested to run for the constituency, but invariably declined the proffered honor, preferring to adhere to his chosen profession than to enter the political arena. In 1844 he returned to Montreal, and recommenced practice, which he continued up till two years ago, when his illness compelled him to give it up.

In 1852, in conjunction with the late Drs. R. L. Macdonnell, F. C. T. Arnold, and Drs. G. E. Fenwick and R. P. Howard, he assisted in organizing the St. Lawrence School of Medicine, and acted as its Secretary. This school only delivered one course of lectures, when some seventeen students attended. It was closed simply because, being a school, its students could not receive a degree, and would have had to go elsewhere for that honor, while those who might have been satisfied with a simple license to practice medicine would have had to present themselves for examination before the College of Physicians and Surgeons, on which Board their opponents held powerful sway.

In the same year (1852), in conjunction with the late Dr. R. L. Macdonnell, he started and edited *The Canada Medical Journal*, which, for want of support, was discontinued after one volume had appeared. During the building of the Victoria Bridge Dr. David was one of the physicians to the contractors; he was, from 1847 to its being done away with by Government, Secretary to the Central Board of Health, and a physician from May, 1849, to December, 1851, to the Montreal General Hospital; and from December, same year (1851), until it was merged into the present Hotel Dieu Hospital, physician and clinical lecturer in medicine to the St. Patrick's Hospital. In 1870 he, with the late respected Dr. Smallwood and Drs. Hingston, F. W. Campbell, Trenholme, Leprohon, Godfrey, Kennedy, Gardner and Kollmyer, started a new school of medicine, which became the present flourishing Medical Faculty of Bishop's College. He became Dean in 1870, and from the first session filled the chair of Theory and Practice of Medicine, which post he retained up to two years ago, when he was elected Emeritus Professor. In 1871 he received the degrees of M.D. (*ad eundum*) and D.C.L. *honoris causa* from his University, and in 1881 the Faculty of which he was the head founded in his honor the "David Scholarship," which is given "to the student who obtains the highest number of marks in the primary examinations, and consists of one full course of the final branches delivered at the college," thereby perpetuating his name with the college he worked so hard for in his later years.

Dr. David was one of the original members of the Canadian Medical Association, and in 1869 was elected its General Secretary. He filled the duties of that office till 1881, when failing health compelled him to resign. His urbanity and general business knowledge were of great use to the Association, and there were but few who did not miss his amiable face, when in 1881 the Association met for the first time without him. Years ago he was a Governor and Secretary of the College of Physicians and Surgeons, and since 1878 he was one of the representatives on this Board from his own Faculty.

In 1867 he joined the 6th Battalion of active militia in this city—now that splendid corps the 6th Fusiliers—as surgeon, which post he resigned in July, 1878. During his tenure of this post he served on the frontier during the Fenian Raid of 1870, and was principal medical officer of the Brigade during the march from St. Johns to Pigeon Hill and return, on 26th May, in that year, and during the time it did duty at St. Johns. Again, in 1871, he held the same position whilst with his regiment at Laprairie Camp, and in 1872, at the camp at St. Andrew's. He also served with his regiment in this city at various times in aid of civil power, notably the burial of Guibord, and the Orange troubles at the time of Hackett's death and resigning his rank of surgeon he was granted the honorary rank of lieutenant-colonel in the militia for long and faithful services of forty-six years.

Dr. David contributed at various times to the Medical Journals of this city, and his articles were thoughtful compositions, for he was an earnest student of his profession. Our October number contained his last contribution, and as a record of past events, which no other pen could give, it is very valuable. Written during a period of much suffering, its preparation during his last moments was but another illustration of that indomitable pluck which was so characteristic of the man.

Dr. David had been President of the Natural History Society of this city, besides holding other offices in the same Society, and at the time of his death was a life member thereof, elected September,

1859; also a trustee or warden of the Portuguese Congregation of Jews Synagogue in this city, in which congregation he has one time or another held every office it were possible for a layman to hold.

Among others he held the following degrees and offices:—Life member Natural History Society; member by diploma, 1833, Medical Society of Montreal; licentiate Royal College Surgeons, Edinburgh, Scotland; extraordinary member Medical Society of Edinburgh; graduate University Lying-in-Hospital of James VI. College, Edinburgh (diploma); Doctor of Medicine (M.D.) James VI. College of University of Edinburgh, Scotland; *commissioned* to practice as a physician, surgeon and *man-midwife*, signed by Earl of Gosford, Governor-General of Canada, 4th January, 1836; corresponding member Literary and Historical Society of Quebec; licentiate College Physicians and Surgeons of Lower Canada; member Canadian Medical Association, 1868, and General Secretary thereof from 1869 to 1881; corresponding member Gynæcological Society of Boston, Mass.; Governor of the College of Physisicians and Surgeons, Lower Canada; honorary member American Medical Association of the United States, 1880.

Among the entire profession he was much beloved and looked up to as a man of the most sterling honor. It was a common saying, no one ever knew David to do a mean and disreputable act towards a brother practitioner. To the young men of the profession he was ever exceedingly kind, and although a fiery medico-politician, those he fought most bitterly loved him the best. As our contemporary the *Canada Medical and Surgical Journal* says: "He lived a busy and useful life, and he died at a good old age respected and honored by all."

His funeral took place on 8th inst., and was one of the largest Montreal has seen. The pall-bearers were Dr. R. P. Howard, Dean of McGill Medical Faculty; Dr. Rottot, Dean of Laval Medical Faculty; Dr. Dorsonnens, Dean of Victoria Medical Faculty; Dr. F. W. Campbell, Acting Dean Bishop's College Medical Faculty; Dr. Robillard representing the College of Physicians and Surgeons of the Province of Quebec; and Dr. Henry Howard, representing the general Medical profession.

At a meeting of the Medico-Chirurgical Society of Montreal, held on Friday evening, the 17th inst., the following resolution was passed unanimously —"Resolved, That the Medico-Chirurgical Society of Montreal deeply regret the death of A. H. David, M.A., M.D., Dean of the Faculty of Medicine of Bishop's College, and formerly a member of this Society. Always highly esteemed and respected by his brother practitioners for his many sterling qualities and honest bearing towards them, being especially kind and considerate to the younger members of the profession, his loss will be felt, and his place can with difficulty be filled. That this Society tenders its sincere sympathy to the members of the bereaved family, and assures them that the profession sympathizes with them in their great affliction.

We add the following resolution:

That in the death of Dr. A. H. David the Medical Faculty of the University of Bishop's College have to deplore the loss of their respected Dean, who from the first inception of the Faculty until his last moments took the deepest interest in the welfare of the College, and contributed largely to its success. The Faculty desire to convey to his bereaved family their sincere sympathy in the loss thus sustained by them, by the Faculty and by the Medical Profession at large.

CORRECTION.

In our last number we published among our selected articles one from the pen of Dr. Godell of Philadelphia "On 113 Cases of Operation for Laceration of the Cervix Uteri," and credited it to the *Medical Gazette*, that being the journal credited with the article in the source from which we copied it. We now learn that the article first appeared in the January, 1882, number of the *American Journal of Obstetrics* published at New York. We gladly make this correction, and in so doing desire to say that the *American Journal of Obstetrics* is one of the best magazines published, and that it should be in the hands of all those members of the profession who are interested in obstetrical literature.

COLLEGE OF PHYSICIANS AND SURGEONS, PROVINCE OF QUEBEC.

A charlatan named Jean Jacques, *alias* Johnny, LeBland, of the Parish of St. Pierre les Becquets, District of Three Rivers, against whom the College had obtained a conviction, has been imprisoned in the common gaol of Three Rivers for the term of imprisonment according to the Medical Act, being unable to pay the fine and costs.

REVIEWS.

Manual of Diseases of the Skin. By L. Duncan Bulkley, A.M., M.D., Attending Physician for Skin and Venereal Diseases, at the New York Hospital, &c., &c. Second Edition. New York: G. P. Putnam's Sons; Montreal: Dawson Bros.

This little work presents in a practical and concise form the subject of skin diseases; and the author's great experience as a specialist is a sufficient guarantee that it contains all that is essential for a guide book. He has based his classification upon that of Hebra's, arranging the groups according to pathological changes. The relative frequency of the different affections is estimated by an analysis of over 8,000 cases. A few general rules are laid down as aids in forming a diagnosis, while the diagnosis of each affection is given in connection with the individual disease. The chapters on Diet, Hygiene and Therapeutics will be found of great practical importance, as heretofore insufficient attention has been given to this portion of the subject. Appended is a formulary containing 108 selected and well attested prescriptions. We commend this manual to the student whose time does not permit him to carefully read the larger treatises on the skin, as it will enable him to recognise the different affections usually seen at Hospital clinics. The general practitioner will also find it a useful work to refer to in his office practice.

The International Encyclopedia of Surgery: A Systematic Treatise on the Theory and Practice of surgery, by Authors of Various Nations. Edited by John Ashurst, jr., M.D., Professor of Clinical Surgery in the University of Pennsylvania, in six volumes. Vol. I. New York: William Wood & Co., 1881.

Judging by the size of the volume before us, this Encyclopedia, when completed, will comprise a very respectable surgical library. The comprehensive nature of the undertaking may be surmised when it is stated that herein there is contained over 700 pages of reading matter; numerous woodcuts and beautifully executed chromo-lithographs illustrate its pages, while the correctness of the text exhibits the careful supervision of its able Editor. This volume embraces such subjects as are usually included under the heading of General Surgery. The contents are as follows:—Disturbances of Nutrition; the Pathology of Inflammation, by S. Stricker, M.D., Vienna; Inflammation, by William H. Van Buren, M.D.; Erysipelas by Alfred Stillé, M.D., LL.D.; Pyæmia and Allied Conditions, by Francis Delafield, M.D.; Hydrophobia and Rabies, Glanders, Malignant Pustule, by W. S. Forbes, M.D.; Scrofula and Tubercle, by H. T. Butlin, F.R.C.S., London, Eng.; Rachitis by J. Lewis Smith, M.D.; Scurvy, by Phillip S. Wales, M.D., Surgeon General U.S.N.; The Reciprocal Effects of Constitutional Injuries, by A. Verneuil, M.D., Paris; General Principles of Surgical Diagnosis, by D. Hayes Agnew, M.D., LL.D.; Shock, by C. W. Mansell-Moulin, M.A., M.D. Oxon., F.R.C.S. London, Eng.; Traumatic Delirium and Delirium Tremens, by Wm. Hunt, M.D.; Anæsthetics and Anæsthesia, by Henry Lyman, A.M., M.D.; Operative Surgery in General, by John H. Brinton, M.D.; Minor Surgery, by C. T. Hunter, M.D.; Plastic Surgery, by C. Johnston, M.D.; Amputations by John Ashurst, jr., M.D. These various subjects are elucidated in a most exhaustive manner, and each may be regarded as a complete essay. The remarkable changes in the views held by pathologists during the past decade, especially in regard to the origin of pus cells, is shown in the article on the Pathology of Inflammation, much new light being thrown on this subject; while that on inflammation is a very practical and valuable contribution to our literature. All the subjects enumerated will be found equally of value, and the Surgeon who devotes a portion of his time to their careful perusal will find himself amply repaid for so doing.

Transactions of the American Gynecological Society. Vol. VI., for 1881. Philadelphia: Henry C. Lea, Sons & Co.

The issue of the volumes containing this Society's transactions should be welcomed by every gynecologist and general practitioner. In every volume papers of the greatest importance will be found, written by specialists eminent in the practice of Gynecology. The writers have devoted considerable time and labor in their production, as evidenced by the manner in which they are presented. In the discussion which follows each paper we obtain the criticisms and opinions of the ablest men of our time, each adding his quota of experience, and thus we have recorded a great deal of useful knowledge which otherwise might be altogether lost to the profession. The delay in the

issue of these volumes is to be regretted, as they are seldom published until some months have elapsed since the Society has last met. In the volume before us we have the table of contents, list of fellows, and report of meetings placed at the beginning, and at the end of the volume the usual Gynecological Index is inserted, forming a very important guide to the literature of these subjects, and is evidence that a great deal of patient labor is given to make it a complete reference of all that is written during the past year relating to diseases of women. Twenty-one papers were read and discussed. All the papers are of interest, and some of considerable practical value.

Dr. Garrigue's paper on Exploratory Puncture of the Abdomen will interest ovariotomists, his conclusions being that tapping gives valuable information in forming a diagnosis of cystic tumors; that all tumors should be tapped before operation, and that carefully performed this is a safe procedure. In the discussion which followed, the majority of the speakers expressed their disapproval of so doing as being unnecessary, and not without dangerous consequences.

A paper on Pelvic Effusion resulting in abscess is important, considering the relation of uterine disease to pelvic inflammations. The necessity of an early recognition of these inflammations is pointed out, and also the fact that they are often overlooked and improperly treated; this is seen by the adhesions so often met with.

Forcible Elongation of Pelvic Adhesions was the subject of a paper by Dr. Van de Warker, and his method of doing this explained. Dr. Goodell's paper on Bursting Cysts of the Abdomen gave cases of these rare tumors which the author considers to arise from the parovarium, or broad ligament.

Axis Traction with the Obstetric Forceps, by Albert Smith, of Philadelphia, elicited a valuable discussion. The writer objects to the Tarnier Forceps as being too complicated, disinfected with difficulty, the compressing screw being dangerous, and, lastly, he believes that *it cannot do what it professes to do, make axis traction at all.* He believes that axis traction can be better effected by the ordinary forceps, by pressure on the lock backwards and downwards with one hand while the other lifts the handle upwards. He also favors the "Davis" forceps as being the best, Drs. Lusk, Fordyce Barker, Thomas, Wilson, Taylor and others taking part in the discussion. Dr. Lusk said the application of Tarnier Forceps was limited to a certain class of cases where immediate delivery was required in a moderately contracted pelvis with the head at the brim, removing the instrument before the head passes the vulva. Dr. Barker expressed the same views, the operator allowing nature to accomplish the mechanism, while he follows nature by the guide to the tractors.

Can laceration of the cervix be prevented? Dr. Polk ably presented this question of so much interest owing to the prominence given to the lesion of late years by the writings of Dr. Emmet. His conclusions are that most of the lacerations of the cervix are avoidable. Necessarily only a few of the papers are mentioned, sufficient, however, to show the value of this Society's work.

Suppression of Urine: Clinical Descriptions and Analysis of Symptoms. By E. P. Fowler, M.D. New York: Wm. Wood & Co., 1881.

The substance of this small volume was presented in a paper to the New York Medico-Chirurgical Society, December 14th, 1880. The author gives an analysis of the symptoms present in 93 cases, with illustrations, tables and diagrams. The special significance of each symptom is considered, as well as the influence of sex and age. The duration of anuria is also noticed. The value of this work is in the statistics, which are included.

An Index of Surgery: Being a Concise Classification of the Main Facts and Theories of Surgery, for the Use of Senior Students and others. By C. B. Keetley, F.R.C.S., London, Eng. New York: Wm. Wood & Co., 1882.

The author states in his preface that it is intended for the senior student prior to his final examination, after having carefully studied a complete text-book. From this standpoint this index will be found very useful, otherwise we fear but little useful knowledge can be gained by a study of it. Its value consists in presenting the chief points of Surgery in a brief and accurate manner and in supplying notes to the student whose pen is unable to follow a lecturer. To obtain a correct knowledge of the subject it is essential that a complete text-book should be studied by the student, and then he will find this little work of value as a review of the work already accomplished. The practitioner, in like manner, may find it useful to refer to.

THE CANADA MEDICAL RECORD.

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TUBERCLE BACILLI.

BY GEORGE WILKINS, M.D. M.R.C.S. ENG.,

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The presence of the bacillus of tuberculosis is of such grave importance that any certain method of demonstrating its presence or absence, as the case may be, in the sputum, so that even one unaccustomed to frequent use of microscope can readily see it when present, is worthy of consideration. Koch's method is now almost entirely given up: it could be seen only with the high powers and special illumination. To see it with a Hartnack No. VII., or even with his No. 9 immersion frequently required a stretch of imagination.

Many experienced microscopists, some of them extensive workers in the wide field of Bacteria, have publicly expressed their inability to discover them when proceeding according to the methods suggested by Koch. Some of these, owing to improved methods, have recanted. Ehrlich, a pupil of Koch, gave the key to these in suggesting the addition of pure aniline as a base, and the use of an acid instead of alkali as a part of the process of preparation. Koch has now adopted Ehrlich's method. Heneage Gibbes, in the *Lancet* of August 5th last, suggests some slight improvements in Ehrlich's methods.

In a late number of the *Berliner Klinische Wochenschrift* Dr. Balmer and Professor Fraentzel slightly modify Ehrlich's methods. First of all they suggest that the cover-glass should be only 0.10 to 0.12 millimetre thick. A small portion of sputum is placed on a cover-class; this is spread over by drawing it across another cover-glass until an even layer is obtained; they are now permitted to dry, and then slowly passed three times through the flame of a Bunsen burner. One gramme of fuchsin is dissolved in 50 of aniline water, freshly prepared; the cover-glasses are permitted to float on this,—sputum downwards,—for twenty-four hours. They are now washed in distilled water, and subsequently placed for about half a minute in diluted nitric acid (one part acid to three distilled water). This should completely remove the coloring matter (the bacilli if present retain this color). They are again washed with distilled water, and then placed for about half a minute in a concentrated solution of methylene blue, again washed in distilled water, and placed on filter paper until dry. Should they not dry rapidly they can be passed once or twice through the flame of a Bunsen's burner, and be subsequently mounted in a drop of Canada balsam.

We quite agree with these observers as to the necessity of placing the preparation twenty-four hours in coloring matter as first recommended by Koch. The results of our investigation justify us in saying that placing the pre-

paration for only half an hour in the staining fluid, and should no colored bacilli be seen, to conclude from that that none were present in the sputum, one would be very liable to err. We have in our possession now some preparations mounted as recommended by Gibbes, in which are only a very few scattered bacilli to be seen colored. With a HOMOGENOUS immersion lens, others can be recognized uncolored. Sputum of the same patient with the prolonged immersion in the staining fluid shew all that exist deeply colored. We may draw attention here to the great superiority of the homogenous immersion to the water immersion, and the advantage to be obtained by a wide-angled condensor such as Abbé's for illumination. Koch, in his brochure on "Wunds infectionen Krankheiten," draws particular attention to this fact: Unstained bacilli which were recognized only with difficulty by Hartnack's No. 9 immersion can be seen readily even by the uninitiated by a Zeiss' homogenous immersion illuminated with an Abbé condensor.

To refer again to the significance of bacilli in sputum: Balmer and Fraentzel state that during the months of May, June, July and August last they had made several examinations of the sputum in 120 cases of phthisis; they also examined the sputum of other cases in order to obtain positive results. Their examinations, besides enabling them to agree with other observers who state that "where tubercle-bacilli are found in the sputum, we have there tuberculosis of lungs," permits them to draw stronger conclusions: indeed they say that "where no bacilli are found in the sputum after repeated and accurate examinations, there is no tuberculosis of lungs."

In support of these assertions they mention that autopsies were held on all the cases that died during this period, and in none of the cases in which no bacilli were found during life did they find a tubercular condition of the lung. They consider that the results of their observations justify them in asserting amongst other things:—That the prognosis of a case of tuberculosis of lungs can be drawn from the number and degree of development of bacilli in sputum. All cases with abundant, well-developed bacilli give a bad prognosis. These cases improve proportional to the decrease of the bacilli. In all cases of acute tuberculosis bacilli are found in very large numbers. Their degree of development is very various; in many cases they are small, badly developed, and only occasionally found with spores. In these cases their number is always small. Such bacilli are found in cases in which the disease progresses very slowly or is almost inactive, especially in old closed cavities surrounded by sound tissues.

In all rapidly progressing cases in which there is present fever, nightsweats, etc., the bacilli are much larger, the spore formations are more distinct and much more easily recognized.

The difference between the numbers of bacilli in the sputum of fresh cavities in the lung and in the walls of the cavity itself was very striking. Whilst they were present in large quantities in the sputum, there were very few in the walls. The sputum appears therefore a much better nidus for their development than the living lung tissue.

The access of oxygen to the cavities in the lungs cannot be the cause of their abundant development, as they found them equally abundant in the purulent exudation of the closed knee-joint of a patient with tuberculous affection of this joint.

They found there bacilli not only in sputum and the walls of lung cavities, but also in the tissues; in the discharge from tuberculous ulcers in lungs, in the walls of tuberculous intestinal ulcers, in pus of a tuberculous knee-joint inflammation.

They consider the presence or absence of bacilli is of importance in diagnosing ulcers, joint affections, etc., of a tubercular nature.

Society Proceedings.

MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

Stated Meeting November 17th, 1882.

DR. R. A. KENNEDY, PRESIDENT, IN THE CHAIR.

Dr. Osler exhibited the following Pathological Specimens:

(*a*). *Cerebral Aneurism and Hæmorrhage*, from a case in the Montreal General Hospital under the care of Dr. Molson. The patient, a woman, æt. 62, was admitted in a semi-unconscious state, with complete paralysis of the right side, following a fit she had had some three days before. As far as could be ascertained her previous health was good and her habits temperate. Death occurred on the 7th day after admission. At the autopsy was found a small saccular aneurism situated upon the left middle cerebral artery, which had ruptured and pro-

duced extensive laceration of the inner and anterior part of temporal lobe and hæmorrhage into the meninges at the base. The arteries were atheromatous, and from the exceedingly thin structure of the wall of the aneurism it is probable that it originated in an atheromatous ulcer, exposing the middle and outer coats which had yielded to the pressure. There was no heart disease and no special change in the other organs. Dr. Osler remarked that this was the sixth specimen of cerebral aneurism he had exhibited to the Society.

(*b*). *Verminous Aneurism in Horse.* The animal had been admitted to the infirmary of the Montreal Veterinary College with colic, and had died in about 36 hours. The post-mortem shewed intense engorgement, with great distension of the small intestines. The aneurism was from one of the mesenteric branches, and contained thrombi among which were numerous examples of the palisade worm, *Sclerostonum Armatum*. The so-called colic of horses is very frequently produced by these aneurisms, portions of the thrombi become dislodged and plug the terminal branches of the mesenteric arteries and cause infarction of the portion of the bowel supplied by the plugged vessel. In reply to a question by Dr. Gurd, Dr. Osler stated he did not think these cases could be distinguished from those of ordinary colic; Indeed Prof. Bollinger of Munich held that colic in horses was in the majority of cases of embolic origin and due to those verminous aneurisms.

(*c*). *Cancer of Stomach* with enormous *Secondary Cancer of Liver*. This case was also under the care of *Dr. Molson*, who gave the following clinical history:

L. P., æt. 52, healthy up to two months ago, when he began to lose flesh and get weak, with pain after eating and eructation of wind. On admission, November 3rd, 1882, was decidedly cachectic; great prominence with evidence of a tumor occupying the whole of the upper zone of the abdomen. Commencing on the right side and extending over towards the left in the median line, it extended two inches below the umbilicus and on the right side down as far as the ilium. Œdema of both legs and feet. Urine contained abundance of lithates, a small amount of albumen, and numerous granular and hyaline casts some days after admission. Jaundice set in gradually but this was never deep, and vomiting for the first time occurred. He died November 16th, p.m. The stomach shewed a small, flattened, slightly raised cancer, situated on the lesser curvature, about 1½ inches from the pylorus; it had an excavated base, puckered and hard on the peritoneal surface, and a chain of enlarged glands extended along the lesser curve to the cardiac. The microscopic examination shewed it to be a cylindrical-celled epithelioma. The liver was enormously enlarged, weighing over thirteen pounds, and presenting innumerable masses of secondary cancer scattered through its substance.

(*d*). *Erosion of Internal Carotid in Cavernous Sinus* six weeks after a blow on the head. Fatal hœmorrhage from the nose. The patient, æt. 21, had received a blow over the left eye, being one of the victims of the "Beauharnois" boiler explosion. There was a long wound extending the whole length of the eye-brow, but it was not thought he had received any other injury, as he recovered quickly. Some time after, however, he noticed that the sight of that eye was failing, and he consulted Dr. Buller, who diagnosed commencing atrophy of the optic nerve, due probably to extravasation in the sheath. He had had several attacks of epistaxis, but not of an alarming character. One morning, about six weeks after the accident, while washing his face, profuse hæmorrhage took place from the nostrils, and he died before assistance could be procured. At the post-mortem the orbital ridge of the frontal bone was found indented at the site of injury. The orbital plate presented an area of superficial erosion about three lines in width, extending beneath the *dura* from a point corresponding to the external wound, to the body of the sphenoid. The left wing and body of the splenoid slightly reddened, the surface of the bone eroded, and at one spot in the latter the bone was so soft that it broke on a slight touch. The sphenoidal and ethmoidal cells were filled with coagula. On slitting up the internal carotid in the cavernous sinus, just as the vessel turns up to enter the skull, there was seen an opening on its interior part leading directly into the sphenoidal cells. There was a small spot of red softening the size of a *ten cent piece* in the third left temporal convolution. Though no fracture of the sphenoid was evident, yet it was believed that at the time of the accident a slight fracture must have occurred leading to ulceration and erosion of the bone and subsequent perforation of the carotid. Dr. Osler remarked that the case was unique in many respects, but Mr. Prescott Hewitt, in his lectures upon fractures at the base, mentions an instance in

the practice of Mr. Scott of the London Hospital, in which after an injury a pulsating tumor of the orbit occurred, and during an examination profuse hæmorrage from the nostrils took place, which was controlled by compression of the common carotid, and subsequently cured by ligation of that vessel.

(e). Specimen from a case of diptheria, showing blocking up of the glottis by false membrane and extension down the trachea into the primary bronchi. Tracheotomy had been performed, but with only temporary relief. A point of interest in this case was the *coking* and hardening of the exudation at a point corresponding to the orifice of the tube, which must have materially interfered with the entrance of air.

Dr. Wilkins exhibited *Tubercle Bacilli* prepared by the *Ehrlich-Gibbes* method, with an important modification, as suggested recently by Balmar & Fraentzel. The sputum after being spread out in a thin layer on cover glass, and dried and passed through the flame of a Bunsen's burner, is now placed in a solution of *fuchsin* in *aniline* water, (one part of *fuchsin* to fifty parts of *aniline* water); it is kept in this for twenty-four hours, after which it is taken out and washed in distilled water, and placed for about half a minute in dilute nitric acid (one of acid to three of water). After being again washed it is placed in a concentrated solution of *methylene blue* for a few minutes. The specimen is then thoroughly dried, passed through a *Bunsen* flame once or twice, and mounted in balsam.

Dr. Wilkins read a paper on a case of *Obliteration of Superior Vena Cava.*

(The specimen was exhibited at a former meeting of the Society.)

The patient was admitted into the Montreal General Hospital on June 27th, complaining of great dyspnœa which condition existed through the whole course of the disease. A year or so before coming into Hospital he felt something give way on lifting a heavy weight, and has suffered more or less ever since.

Shortly after admission he became cyanotic, with an œdematous condition of the head and neck. About six weeks after entrance into Hospital fluid began to collect in the left pleural cavity, and subsequently also in that of the right side: he was tapped a great number of times, but only experienced transient relief—eight hundred and sixty-two ounces in the aggregate was drawn off. Patient's pulse, which previous to this never went above 104, now rose considerably, and the temperature, which hitherto had been normal, rose to 102°. Dyspnœa became very severe; he was again aspirated, withdrawing twenty ounces of bloody fluid from the left side and forty ounces of clear fluid from the right. The patient finally died from exhaustion.

At the autopsy the *superior cava innominate and internal jugular veins* were found obliterated by thrombi; the left pleura was covered with recent lymph; the azygos veins were widely dilated, and the foramen ovale was found to be permanent. Dr. Wilkins exhibited beneath the microscope a number of sections from various parts of the thrombosed vessels, the most interesting being those taken from the cardiac extremity of the superior vena cava, showing cicatricial thickening of a portion of the circumference of the vessel, to the extent of two millimetres, the vessel itself being but six millimetres in diameter, and filled with organized clot. No other lesion could be discovered accounting for its occlusion. Dr. Wilkins considered these changes to have arisen from a primitive phlebitis, commencing in the adventitia, causing changes in the intima, with subsequent thrombosis, this giving rise to secondary phlebitis of the vessels above, resulting in a thrombosed condition of these vessels also. Some of the sections showed fibroid thickening of the septa of the alveoli of the lungs, due to a passively congested condition of these organs. The cyanotic appearance was explained by the blood current being delayed until a collateral circulation was established. In accounting for the dyspnœa, Dr. Wilkins stated that the blood of the left bronchial vein reached the heart through the superior vena cava, and consequently when that channel closed it would necessarily return to a great extent by way of the pulmonary veins, thus distending them and helping to cause thickening of their walls; he considered the permanency of the foramen ovale an important factor in causing the dyspnœa, and the remarkably slight relief obtained by aspirating the pleura. As soon as the blood current from above was shut off by closure of the superior cava the current from the inferior cava, meeting with no opposed current, must lift up the upper segment of the *annulus ovalis*, and get into the left auricle, and so block up the blood returning from the lung.

Dr. Wilkins accounted for the larger quantity of fluid in the left side, from the fact that on that side the blood from the four superior intercostals reaches the heart by the superior vena cava, while

from only one on the right side. After thrombosis of the superior vena cava blood would reach the heart by enlarging the inosculations between the intercostals, and between these and the azygos veins.

Discussion on Paper.—Dr. Osler thought the only rational explanation of the affection was a phlebitis excited by inflammation in contiguous parts. He would not, however, attribute the same importance to the valvular opening between the auricle and ventricle as Dr. Wilkins had done; he had frequently seen this condition with an orifice of considerable size, and without giving rise to any symptoms.

Dr. Ross asked if it was not a fact that a small tube had been used in this case for continuous drainage, and had been followed by pleurisy. He had seen a case of ascites treated in this way, after tapping had been performed in the ordinary way without ill effect on two occasions; followed by fatal peritonitis in 48 hours. He was inclined to think this method was not altogether safe. In these cases is the inflammation the result of irritation or the inadvertent entrance of germs?

Dr. Roddick also asked how the occurrence of inflammation in these cases could be explained. He doubted if these short tubes always reached the cavity, and spoke of the possibility of their slipping back, and by their constant irritation of the peritoneal or pleural surface setting up inflammation.

Dr. Osler also mentioned a case of abdominal dropsy drained in this way and followed by fatal peritonitis.

Dr. Ross, in reply to Dr. Osler, said that Southey recommended his trochar only in conditions of anasarca, but that others had recommended its use in draining serous cavities also.

Dr. Hingston spoke of the great risk always attending puncture of the abdomen, either with or without a tube, and cited a case where death had followed a simple puncture in three or four days.

Dr. Roddick thought that in the case of ovarian dropsy, the operation of tapping should always be approached with great caution. He believed that an exploratory incision with antiseptic precautions was, as a rule, less likely to be followed by mischief in these cases. With regard to the operation of tapping in ordinary abdominal dropsy, he was in the habit invariably of closing the puncture with a catgut suture and dressing it with iodoform, as he had seen at least one case in which septic peritonitis followed tapping where a leakage was allowed to go on for some hours.

Dr. Bell thought the history of the case did not show it to have commenced with a severe enough illness to have been a *phlebitis* and subsequent thrombosis at the time of the accident. Might not the cicatricial tissue which was found partially surrounding the vein, and which was probably the result of laceration of tissue and inflammatory action at the time of the severe strain described by the patient as the starting point of his illness have acted by constricting the vessel so as to retard the blood current, and thus cause a thrombosis which was followed by phlebitis? The history of the case seemed to show that the phlebitis was acute and recent when admitted to hospital, while he attributed his illness to an accident twelve months previous. The aspirations of the chest as shown by the report had been performed a great many times without any unpleasant consequences. The first time the *Southey tube* was used it remained *in situ* for twenty-four hours and then slipped out. After twenty-four hours it was again introduced, and in a few hours was followed by signs of pleural inflammation. He thought the continuous presence of the tube was the cause of this inflammation, and considered that it was almost, if not quite, impossible to leave a tube in any cavity for any length of time without air entering in at the sides, more especially in the pleural and peritoneal cavities where the action of the lungs and diaphragm exercised as it were a constant suction.

Dr. Wilkins, in reply to Dr. Osler, stated that he could quite understand, other conditions being all right, how a permanent foramen ovale could be unattended with interference in the usual course of circulation, but as soon as the current from above was cut off, the current from below would lift up the upper segment of the annulus ovalis. Dr. Wilkins shewed the patient's heart with this projecting considerably, and said, supposing a force pump attached to inferior vena cava, before opening the walls of the heart and water pumped in, it would be impossible to prevent it passing through into left auricle, there being no counter current from above. The projecting upper segment of annulus is directly in the course of the fluid from below, and as it must exercise pressure on the lower portion before it reaches the upper, it will unavoidably open the valvular orifice and allow escape into the left auricle. In reply to Dr. Bell, Dr. Wilkins said, in the absence of any tumor, the

theory advanced by Dr. Bell was the one he was most inclined to favor until he examined sections of various parts of the vessel. No cicatricial growth of any kind existed outside of the walls of the vessel pressing on the vessel causing its closure; but for a short part of its course, not quite half an inch, there was a very marked cicatricial thickening of the walls of the vessel itself; the cord-like feeling perceived at the autopsy was due to this and the firmly organized thrombus; the lesion was so very limited he did not think it could have resulted from the rupture of any vessel outside or in the vicinity of the origin of the superior vena cava. He did not see any reason why it might not have originated from rupture of some of the capillaries of the adventitia at the time of the patient's complaining of something giving way in his chest.

Dr. Henry Howard, in speaking of the great loss which the medical profession in general, and that of this city in particular, had sustained in the death of the late Dr. David, moved the following resolution, which was seconded by Dr. Hingston and carried. Resolved:—"That the Medico-Chirurgical Society of Montreal deeply regret the death of A. H. David, M.A., M.D., Dean of the Faculty of Medicine of Bishops College, and formerly a member of this Society. Always highly esteemed and respected by his brother practitioners for his many sterling qualities and honest bearing towards them, being especially kind and considerate to the younger members of the profession, his loss will be sorely felt, and his place can with difficulty be filled. That this Society tenders its sincere sympathy to the members of the bereaved family, and assures them that the profession sympathizes with them in their great affliction."

Stated Meeting Friday, December 1st, 1882.

DR. T. G. RODDICK, VICE-PRESIDENT, IN THE CHAIR.

PATHOLOGICAL SPECIMENS EXHIBITED.

Pericæcal Abscess.—Exhibited by Dr. George Ross. The following are the main clinical features of the case:

The first day there had been sudden acute pain in right iliac fossa, with great tenderness and high fever. Dr. Ross saw him soon after with Dr. Bell. They applied leeches freely, and gave opiates. Immediate relief followed, and the temperature fell. For some days condition quite satisfactory. Then slight fever and uneasy feelings in the belly. After the lapse of several days more a chill and increased fever. From this time the temperature fluctuated greatly, accompanied by irregular chills. It was believed that pyœmic absorption was taking place from localized suppuration—but still the most careful exploration of the affected region failed to determine any fulness, fluctuation, or other sign by which to localize the abscess. Dr. Ross had been strongly of opinion that a small abscess would be found behind the cæcum. The idea of operating with a view of finding the matter was earnestly discussed in consultation with Drs. Howard, Shepherd and Osler, but the difficulties in the way were believed to be insurmountable. The autopsy completely confirmed the diagnosis. A singular feature was the development of a very loud systolic murmur, so harsh that at first it was suspected to be of pericardial origin. No organic change was found in the heart.

Post mortem.—A recent peritonitis existed, with a moderate amount of exudation; the mesentery was swollen, particularly in the upper part; about the cœcum the parts looked pretty natural, except at the inner margin, just below the valve, where there was considerable pigmentation. On dissecting this point a small saccular abscess the size of an egg was found situated behind the cœcum, and the termination of the ileum, it was quite on the inner side of the cœcum, and did not extend to its outer border. It contained a creamy pus, and the walls were thick and dark. The cœcum itself was healthy. On slitting up the appendix the mucosa for half an inch looked healthy; the remainder of the tube was somewhat dilated, closely adherent to the sac of the abscess, and presented two perforations into the sac. The swelling of the mesentery proved to be an extensive abscess, involving a considerable portion of the membrane, particularly that attached to the jejunum; the mesenteric vessels in these parts were full of pus; the portal vein was distended with pus, the walls thickened, and when followed into the liver many of its branches were found dilated and in communication with saccular abscesses; there was no endocarditis.

Dr. Armstrong spoke of his having had two cases in his practice similar to the one described by Dr. Ross, and with his experience, if another such case presented he would be inclined to look for the matter, and let it out if possible. In the "Annals of Anatomy and Surgery" several cases are reported

as having been operated upon, and with favorable results. He asked if any foreign body or concretion had been found in the abscess cavity indicating that any perforation of the appendix had occurred.

Dr. Osler remarked that the situation of the abscess in this case was such that it could only have been reached by a caparotomy. No foreign body or concretion was found in the sac. In any case of perforation of the appendix the situation of the resulting inflammation would depend on the course of the little tube which, as was well-known was exceedingly variable. In one case which he had examined the appendix passed out at right angles to the cœcum and was attached to the sacrum; it had perforated and formed an abscess in that region, which had ulcerated into the bowel, and produced fatal hœmorrhage. The ulceration was usually due to the irritation of some foreign body or, more often, of a small fœcal concretion, or, in some instances, the distal part of the tube gets cut off from the cœcal portion, the secretions accumulate and produce inflammation of the walls. In this case the patient had had typhoid fever and there may have been an ulcer in the appendix, which had produced the narrowing evident about an inch from the cœcum.

Dr. Osler exhibited a large aneurism of the thoracic aorta taken from a gentleman aged about 70, who had suffered for years with laryngitis and for the past two years with symptoms of intra-thoracic tumor, dullness at the left base, feeble breathing in left lung and pain with cough and blood expectoration. There was the doubt whether the case was one of aneurism or malignant disease. There was no external tumor, *bruit*, no pulsation. The whole of the thoracic aorta was dilated and from its anterior wall two aneurisms projected. The upper one, the size of a large fist, had a wide orifice and was densely laminated with old firm layers of fibrin. It projected into the left lung, which was much flattened by it and the bronchus almost occluded. The other sac sprang from the vessel just above the diaphragm, and was about the size of a lemon. The posterior wall of the aorta was very atheromatous.

The point of great interest in the case was the possibility of the large sac having existed for years, causing the laryngeal symptoms which had troubled him. In this situation aneurisms had been known to last for an unusually long time. Dr. Osler showed a plate from Ziemssen's Archiv. (1877) illustrating an aneurismal sac which had lasted from 1863 to 1876, and had at one time been diagnosed aneurism by Oppolzer and cancer of the lung by Skoda.

In reply to Dr. Henry Howard, Dr. Osler stated that caries of the vertebræ almost always followed aneurisms springing from the posterior wall of the descending aorta.

Dr. Geo. Ross showed specimen of *aneurism of the arch of the aorta.*

The history of the case was as follows:—About one year ago was consulted by J. R. for a troublesome cough Dr. Jas. Bell had already seen the patient and suspected aneurism. J. R. was a well-built; powerful looking man of 32 years of age. Had been only a short time in Canada. In England he practised gymnastics a great deal, and sometimes assisted in public at feats of strength. He still did some running, and even a few days previous to seeing Dr. Ross had been on snowshoes over the mountain. Never complained of shortness of breath, but had lately had a teasing cough which was increased by exertion. He had never had either syphilis or rheumatism. Patient had a constant, short, hacking cough with a marked goose-like character. On examination, distinct evidence from the state of the circulation and from murmurs was found of aortic regurgitation. Physical signs of aneurism were entirely wanting with two exceptions, slight pulsation deep in the episternal notch and very marked tugging at the trachea. A positive diagnosis of small aneurism pressing on the trachea was given. He was treated by rest in bed and potass iodide for several months. He entirely lost the cough. No new sign showed itself as to the chest. Repeated careful examination failed to discover pulsation or bruit other than those from the heart, no indication of pressure on either bronchus. Two months ago he suffered from severe bronchorrhœa with fever and general disturbance and fits of intense suffocation; cough accompanied by the expectoration of great quantities of purulent matter. This entirely subsided in about two weeks. For several months the right radial pulse had been absent. He was so much better that he attended to his business till a few days ago. Death was caused by rupture into the trachea, and a vast flow of arterial blood from the mouth.

The interest in the case lay in the recognition of the disease from the peculiar character of the cough, confirmed by the very marked impulse against the trachea in the absence of all other

physical evidence. The laryngoscope aided also by excluding disease of the larynx and pressure upon the laryngeal nerves. Dr. R. would look upon this as an example of combined aortic valvular disease and aneurism induced from the constant over-exertion or strain of excessive gymnastic exercises.

Dr. Mills gave the following report of the laryngoscopic examination. The laryngoscope was used with a view of determining the cause of the altered breathing, and assist in locating if possible the aneurism. The position and movements of vocal cords found normal. The patient was asked to produce as much difficulty in breathing as he could. Upon doing so the position of the vocal cord remained practically unchanged. It was therefore clear that the cause of the dyspnœa was not in the larynx. Since the air seemed to enter each side of the chest equally well, pressure on the bronchi was excluded. The diagnosis therefore was tumor pressing on the trachea.

Upon holding a double stethoscope close to the open mouth, it was noticed that with both inspiration and expiration there was a wavy interruption of the breath current. This seemed to confirm the diagnosis. Dr. Mills thought this method of investigation might be of considerable value in doubtful cases.

At the autopsy the following condition was found. There was a small projecting tumor the size of a walnut beneath the manubrium. On sliting up aorta there was a circular orifice the size of a copper at the site of the innominate, and this opened into a saccular aneurism of this vessel which projected downward and backward between the arch and the trachea. A small extension of it passed anteriorly and appeared beneath the manubrium. The sac was lined with fibrin at the peripheral part. The subclavian and carotid arose from the upper part of the sac. The trachea was narrowed by the projection of the sac, and about an inch above the bifurcation a rupture the size of a five-cent piece had taken place. The aorta was atheromatous, and the valves thickened, curled and incompetent. Heart hypertrophied, particularly the left ventricle.

Dr. George Ross then read a paper on *two unusual forms of paralysis* under his care in the Montreal General Hospital.

I.—*Case of Paralysis of the Tongue, Lips and Soft Palate—Acute Onset.*

J. M., æt. 45, was admitted into the General Hospital on the 8th November, 1882. He has thick, indistinct utterance, and complains of dizziness and dull pain in the head. His trouble dates from July, 1881, and came on suddenly.

The following are the particulars obtained from him: He has been a hotel porter for 25 years, and always enjoyed excellent health and was strong and robust, used to drink pretty freely, but for two years has entirely abstained. Had gonorrhœa many years ago, but never had syphilis. Has had two attacks of inflammatory rheumatism, but both occurred many years ago.

One year ago last July, whilst driving a *bus*, he was suddenly seized with a *dizziness*, which was taken for sunstroke. Finding himself falling, he dropped the reins and held on to the seat. He broke into a profuse perspiration, and felt a most uncomfortable dizzy sensation in the back of his head. He was lifted from the *bus* and carried into a drug store. He was then unconscious, and remained so for some hours. When he came to he was carried home, for he could not walk. At home he felt very weak, found he could not speak, and felt very dizzy. He remained in bed and on a chair for three weeks, during which time he spoke so badly that he could barely make his friends understand what he wanted. By this time he could walk about the house. Power of articulation gradually improved. He remained weak and unable to work for about nine months.

Patient is a low-sized man, well-nourished. Presents a slightly dull expression of countenance. He speaks slowly, with hesitation and difficulty—all words are pronounced with varying degrees of thickness; there is no nasal intonation. His defective articulation resembles completely that of a man much intoxicated. When directed to protrude the tongue, he does so imperfectly, and with considerable effort. It trembles violently. When first projected, the tip is turned down over the lower lip but is almost immediately retracted; still he tries hard to hold it out, and shuts his teeth upon it in order to do so. It is observed that at the same time the lips become quite tremulous, and the lower jaw assumes a quivering movement. When he tries to whistle, he can only succeed in imperfectly closing the orbicularisoris muscle, short puffing expirations alone are produced, accompanied by a blubbering motion of the lips. He can masticate food well, and swallows without difficulty. On examining the soft palate, it is seen to be much relaxed, the uvula hangs loosely on the

root of the tongue, and handling it produces no reflex contractions of its muscles. Sensation in the lips and tongue appears good. Sense of taste unimpaired. Other special senses unaltered. He walks with perfect freedom, and grasps well with either hands. Reflexes normal. Heart normal. Pulse 62. Fundus oculi presents no change. Urine of natural quantity and appearance, and contains neither albumen nor sugar.

November 13th.—Has complained every day of pain in the back of the head, which he says often prevents him from sleeping.

II.—Case of Paralysis of Right Side of Face, Tongue and Soft Palate.

A. B., mulatto, æt. 53, was admitted into the General Hospital, 20th Nov., 1882, with difficulty of speech and drawing of one side of the face.

Has always been a strong and hearty man. Went to bed in his usual health on the night of the 16th inst; about midnight awoke, and found that he could not speak; the next day he managed to speak, but with great difficulty, could hardly make himself understood. With very slight improvement this condition has lasted up to the present time. There was no loss of power in any of the extremities.

Status præsens.—A. B. is a man of large muscular form, arteries stiff, and somewhat atheromatous, arcus senilis well marked, the right side of the face is observed to be flattened, smooth, and wanting in expression. The mouth is drawn towards the left side, and the right angle is drooping. He can wrinkle; the forehead equally on the two sides; closes the two eyes equally strongly; cannot whistle, in making the attempt the right side of the mouth does not move whilst the left flaps. The tongue is protruded somewhat to the right side; with the mouth wide open, he cannot raise the tip of the tongue against the roof of the mouth on the incisor teeth. In speaking the lingual and dental consonants give the most trouble, and the voice has an appreciable nasal intonation. There is no difficulty in swallowing, solids collect inside the cheeks and cannot be removed from inability to use the tongue. The closed temporal and masseter of the right side appear less firm than the corresponding muscles of the opposite side. On moving the lower jaw forwards it assumes an oblique position, the inclination being towards the paralyzed side, specially noticeable when the mouth is widely open. The uvula is club-shaped, inclined to the right, and the soft palate does not contract at all upon being touched or handled.

Iodide of potassium has been administered, and the patient has markedly improved. Speech is quite intelligible, and he seems otherwise well.

Remarks.—These two cases present certain features in common and still are strikingly different. They both have thick speech and paralyzed lips, without disturbance in the limbs, the result of a sudden seizure; but the chief distinction between them is the fact that, in the first case, the paralysis is bilateral, and in the second it is unilateral. Both have arisen, I think, from a cerebral hœmorrhage which in either case must have been small. In the case of J. M. the lesion is situated, I infer, in the *medulla oblongata*. It is hardly possible to find any other situation where a single lesion could thus injure the function of these particular branches of both 7th nerves and both hypoglosal nerves. If this be true the case presents an unusual form of *bulbar paralysis*, the more serious accompaniments of this trouble being markedly absent, viz., difficulty in swallowing, difficulty in mastication, and disorder of circulation and inpiration. Unusual such forms must be when we consider how closely the important centres for these functions are grouped together in the small medulla oblongata.

I might summarize the case thus: This man whilst in apparent health had a sudden giddiness and rapidly became apoplectic, remained so for some hours, could not walk for three weeks, was weak for several months. Coincident with the attack he lost the power of articulation, which still remains very imperfect. Has marked motor paralysis of the tongue, lips and soft palate. I should infer that he suffered from cerebral shock with apoplexy at the moment of the bleeding, then a complete paralysis of the tongue and an incomplete paraplegia. That the latter was caused only from functional interference with the motor parts, and was therefore entirely recovered from. That the centres of the hypoglosal and facial have been permanently injured, and hence persistent paralysis of these nerves remains.

The second case showing paralysis of the hypoglosal and part of the facial on one side must be due to a lesion removed only a short distance from the contiguous seats of origin of the two nerves.

Remarks.—Dr. Proudfoot mentioned a case of an old gentleman, aged 81 years, subject to attacks

of congestive apoplexy, but never followed by paralysis until June last, when, following an attack, he suffered from paralysis of the tongue and soft palate, great difficulty in swallowing and disturbance of speech; these symptoms have all since disappeared, with exception of difficulty in swallowing, which still exists to a slight extent.

Dr. Major read a paper on a case of *Cancer of the Œsophagus*.

The patient, a female, æt. 47, was first seen by him on the 1st July last. She had suffered from difficulty in deglutition from childhood, not being able to swallow anything larger than a *barley-corn* without great difficulty; this continued with more or less varying exacerbations up to the age of forty (seven years ago), when it became so distressing that she consulted a physician, but no apparent cause was made out. When seen by Dr. Major, in July last, she was considerably emaciated, and appeared to be the subject of some wasting disease. On making a *laryngoscopic examination* the disease was found confined chiefly to the right side, the tissues between the right arytenoid and œsophagus being especially involved; and on this side a very red swelling appeared, about the size of a *pigeon's egg*, its surface studded with four or five yellow points, from which some discharge escaped. The *posterior arytenoid space* was pressed upon to such an extent that the *right arytenoid* was rendered invisible. A guarded opinion at this time was given, the possibility of its being a *chondritis with formation of abscess* being considered. Iodide of potassium with a bitter principle was prescribed, and a weak spray of carbolic acid with bicarbonate of soda used to correct a slight offensiveness of the breath and to aid in the removal of accumulated mucus. This was followed by some temporary improvement, the patient became a little stronger, liquid nourishment was taken more freely, and her breathing was more easy. She was again seen and examined on the 2nd of September; her condition at that time was not so favorable, the difficulty in swallowing was increased, and her breathing was more embarrassed, the *bright red swelling* had developed into a dirty greyish mass, about the size of an acorn, and shewed a more clearly-defined œsophageal origin. The general debility advanced very rapidly, and each subsequent examination revealed local changes taking place. Softening occurred first on the left side and caused increased difficulty in the breathing by prolapse of a mass of broken-down tissue on to the larynx, and at this time a marked alteration in the voice was first noticed. Death occurred November 25th. At the autopsy the upper two and a half inches of the œsophagus was found involved in a cancerous mass, which almost completely obliterated the lumen of the tube. On microscopic examination it was found to be *epithelial in character*. All the other organs appeared normal.

Dr. Major remarked that the interesting features in this case were the great length of time that had elapsed between the first symptoms and the well recognised cancerous condition suggesting the existence of an originally fibrous stricture which had subsequently become malignant, and the absence of *indurated glands* and of *pain* to within a few hours of death. In reply to Dr. Ross, Dr. Major said that for seven years she had taken nothing but liquid diet, not on account of *pain* but from tendency to regurgitation.

Dr. Proudfoot spoke of a case in his memory where ordinary fibrous stricture was diagnosed, and the patient subsequently died of malignant disease.

Dr. Ross said the case was a remarkable one, from the prolonged difficulty in swallowing, and he thought Dr. Major's explanation of *mechanical obstruction from simple fibroid stricture* was very reasonable. The next question to solve would be the probable cause of such a stricture, possibly from injury during childhood. The disease also being so high up, where strictures are almost never found, without traumatic origin.

In reply to Dr. Roddick, in regard to œsophagotomy, Dr. Major said there was no means of making out or limiting the extent of the disease.

Progress of Medical Science.

CODEIA IN TREATMENT OF DIABETES.

R. Shingleton Smith, M.D., B.Sc. Lond., M.R.C.P., Physician to the Bristol Royal Infirmary, gives in the *British Med. Journal* of June 24th an analysis of three cases of diabetes mellitus, in which the beneficial effects of codeia in the treatment of this disease are well shown. The patients all exhibited marked improvement while taking the codeia, which improvement ceased when the drug was withheld, being renewed on its repetition. Morphia had a good effect in two of the cases, but the improvement was less marked with it than with the other alkaloid. We quote from his preliminary remarks such paragraphs as refer directly to opium and its alkaloids in the treatment of diabetes:

Glycosuria having been shown to depend primarily on diseases of the nerve-centers, it is not a little interesting to observe that the drug which most controls it is one which affects nerve-tissues more especially. Opium has, indeed, been used empirically in the treatment of diabetes ever since the time of Aetius. Lecorché observes that since the time of Willis opium has become, so to speak, the panacea of diabetes. . . .

Dr. Lauder Brunton says that under the influence of opum the thirst diminishes, the excretion of urine becomes correspondingly less, and the proportion of sugar present in it falls. He might have added that the weight of the patient ceases to diminish, and generally improves. Recent observers have not been content to rest with this knowledge, but have endeavored to ascertain to which of the alkaloids contained in opium the beneficial effec is due. Morphia has been found to act in a way similar to that of opium; and there appears to be little or no difference of opinion that the one drug, morphia, is equally useful as the other, the watery extract or some other preparation of opium. Codeia was first recommended by Pavy, and was preferred by him, inasmuch as it might be given in large doses without producing drowsiness.

This question of dose is an important one, and is at the root of the use of codeia in diabetes. Some authors recommend small doses; but Dr. Brunton states that "diabetics bear large and sometimes enormous doses of opium and codeia; and in administering these remedies it is well to push the dose until the sugar either disappears from the urine, or until increasing drowsiness obliges us to discontinue it." Dr. Brunton says, "The two remedies which are most serviceable in lessening the excitability of the nervous centers in diabetes are opium and its alkaloid, codeia. The latter may be given in doses of a quarter to half a grain three times a day at first."

Dr. Davy gives a remarkable series of cases in which daily records of the composition of the urine were made, and in which careful analysis of the urine showed that the sugar disappeared entirely under the influence of opium, morphia, or codeia with the aid of restriction in diet. The drugs were given in gradually increasing doses: opium in doses of one grain up to nine grains, thrice daily, morphia up to three grains, and codeia up to ten grains three times a day. The great advantage of codeia over opium and morphia was found to be that, while equally efficacious in controlling the disease, it does not exert the same narcotic effect. When given in a small dose to begin with and increased gradually nothing may be perceived beyond its effect upon the disease.

Dr. Cavafy has subsequently reported a case in which he gave fifteen grains thrice daily with a good result.

Dr. Ord has also reported the case of a woman aged thirty-three, with diabetes of four months' standing, who gained seven pounds in one week with one grain of sulphate of codeia twice a day, after diet alone had failed to produce any good effect.

Although I can not claim such satisfactory results as those given by Dr. Pavy, yet the cases to be reported show that the drug employed has a remarkable power of checking the elimination of sugar, and that a corresponding improvement in the health of the patient results. It would appear that alkalies, and all other methods of treatment are far inferior to the treatment by codeia, which may be considered to have almost a specific action on the disease. The facts before us seem to justify decided language with regard to the use of codeia, which should not be permissive, but imperative, in all cases of advanced diabetes mellitus: whatever else may be given, codeia should first be given, and in fairly large doses, until some physiological effect is produced. Even dieting appears to sink into insignificance by the side of codeia; in one case given by Dr. Pavy the codeia alone was sufficient, without any restriction of diet, the patient being on a mixed diet during the whole time.

It has been supposed that codeia is a dangerous drug. Barnay says, "The tendency of codeia to produce convulsions is so great that it should be excluded from therapeutics." It has been stated as a result of Bernard's experiments on the opium-alkaloids that while narceine is the most soporific element, codeine is that which most tends to convulsions. The literature of codeia does not bear out this statement, and I have never observed any thing to support it.

I have now endeavored to show that the utility of codeia is by no means universally recognized, but that it is fully deserving of confidence—nay, more, is imperatively demanded—in the treatment of diabetes in cases where treatment other than dietetic is required.

APHONIA OF SINGERS AND SPEAKERS.

For this affection Dr. Corson recommends the patient to put a small piece of borax (two or three grains) into the mouth, and let it dissolve slowly. An abundant secretion of saliva follows. Speakers and singers about to make an unusual effort should the night before take a glass of sugared water containing two drams of potassium nitrate (saltpeter) in order to induce free perspiration. In similar circumstances this gargle may also be used:

Barley-water	℥ vj;
Alum	ʒ i-ij;
Honey	℥ ss.

Mix, and use as a gargle.

Or again, an infusion of jaborandi, made by putting two scruples of the leaves into a small cup of boiling water, may be drunk in the morning before getting up. The free sweating is said very quickly to restore the strength of the voice.—*Revue Med.; Lond. Pract.*

HEADACHES IN CHILDREN.

When a child complains of headache our most careful scrutiny is demanded, and if it be too young to describe its sufferings its manner and appearance are highly suggestive of some cerebral disturbance. Look at the little child of some ten or twelve months old, who is well developed and comes of healthy parents. There is the excitement of dentition, and the little thing is observed to put its tiny hand to its head, which it rolls, perhaps, from side to side, and the anxious mother at last detects a slight irregularity in the muscular movements of the eye ball. Reflex nervous irritation is conveyed through the fifth nerve to the brain, and irritation so awakened may be followed at any moment by a convulsion. The child is wakeful, uneasy, and restless. The brain, so needful of rest at this early period of life, is susceptible of mischief. I think there is hardly a practitioner among us who on looking back has not, in the course of his early experience, had reason to think he has overlooked these significant symptoms, and at the same time felt surprise at having neglected them. Habitual headaches in older children indicate an exhausted and irritable brain, and if intellectual exertion be carried too far in such cases mischief is likely to ensue. It seems extraordinary that educated men who have the care of young persons should not see this danger in the anemia produced by over-study, the irritability and excitability of manner, and the impossibility of concentration, so necessary to the accomplishment of any undertaking. If intellectual exertion be carried beyond a certain point the brain becomes anemic, fatigued, and the nutrition in the ganglionic cells of the cortex becomes impaired, diseased, or in some way altered from health. Whatever may be the exact change in these cells, due perhaps in a great measure to the absence of healthy blood, the inference is most probably correct that children so suffering can not readily grasp new ideas; and if strong and powerful efforts are put forward in this direction the knowledge is not retained, the object is frustrated, one idea is mixed up with another, and confusion results. This, I apprehend, is just enough to illustrate the grand problem that the body must be looked to as well as the mind; and the younger the child, the greater is the necessity for the delay of intellectual training. And it does strike one as very extraordinary that the nervous system, which is the last to attain complete development, should be the first to be overtaxed in this age of forcing and strain, when revolutionary ideas are apt to overrule the judgment. It is not that the moderate exercise of the brain in early life is injurious; on the contrary, it is conducive to health. The mind is then flexible and plastic, impressions are enduring, and habits of concentration are easily acquired. It is the premature and excessive exercise of it which is prejudicial, when the bodily powers need the chief attention.

No rigid rules, no cast-iron system, will do for the training of all children. All are not cast in the same mould. Any system of education must be elastic, since mediocrity is the rule; and if more be expected of some children whose physical development is at the same time feeble, then disease or premature ill-health is the consequence.

Headaches are often *hereditary*. They have attacked children of the same family who have been brought up at a distance from one another, and whose surroundings have been quite different. In such cases there is something peculiar in the nervous system itself—a tendency to nervous disease. It will, I think, be often found on inquiry that the parents of such children are liable to nervous disease, nervous exhaustion, paralysis, etc., and perhaps some children of the family have had epilepsy, chorea, or asthma. In many instances, too, there is some faulty condition of the blood. The brain, badly nourished through a scanty supply of blood, and that poor in quality, loses its balance and can not resume its tone.

I will now briefly allude to some of the varieties of headache in children. *Neuralgic* headache (one-side headache) is not a very common type in children, but it oftener occurs than is generally supposed. So far as my experience goes, it has been met with chiefly among *three* classes of children: 1. Those of the neurosal temperament, whose nervous system is easily fretted, excited, and therefore sooner exhausted. If such children are pressed too much with their studies, then they the more readily suffer. Any degree of intellectual exertion is exciting to children of timid and delicate constitution, who are not only too anxious to learn, but can not throw their studies off the mind. 2. Those children who have been reduced by some long and exhausting illness, in-door confinement, and bad air. 3. Those born of delicate parents, and who are badly fed.—*W. H. Day, M.D., in Medical Press and Circular.*

ON THE TREATMENT OF CONVULSIONS IN CHILDREN.

Eustace Smith, M.D., F.R.C.P. (London *Lancet*):

When called to a case of convulsions the practitioner should lose no time in questioning the attendants, but should have the child placed in a warm bath of the temperature of 90° F., and apply sponges dipped in cold water to his head. This is the time-honored remedy. It is certainly an innocent one; it may tend to quiet the nervous system; and it is one the efficacy of which is so generally recognized among the public that it would be unwise to court unfavorable criticism by neglecting to employ it. The bath must not be continued too long. In ordinary cases the child should be allowed to remain in it for ten or fifteen minutes, according to his age. If, however, the patient be an infant who has lately been reduced by an exhausting diarrhœa, he should not be allowed to remain more than two or three

minutes in the hot water, and cold applications to the head must be dispensed with. If the convulsions have ceased when the case is first seen the bath need not be used; but we should not omit to have the child completely undressed, and then to see that he is placed, lightly covered, in a large cot, and that the room in which he lies is well ventilated and not too light. Care should be taken to unload the bowels by a large enema of soap and water, and if the child be noticed to retch, his stomach may be relieved by a teaspoonful of ipecacuanha wine. In the case of a teething infant opinions differ as to the propriety of lancing the gums. There is no doubt that this operation is a useless one if employed with any hope of hastening the evolution of the teeth; but if the object be to relieve pain and tension I consider the practice judicious, and never hesitate in such circumstances to have recourse to it. If it be desirable to remove all sources of irritation, surely such a source of irritation as a swollen and inflamed gum should not be disregarded. Lastly, if it can be discovered that the child has had pain in the ear, or if the tympanic membrane can be seen to be red, the ear should be syringed out and fomented with hot water, and, if thought desirable, a leech may be applied within the concha, the meatus being first plugged with cotton wool.

If, in spite of these measures, the convulsions return, or signs are noticed of continued irritability of the nervous system, it is best to administer a dose of chloral. Two or three grains can be given to a child between six and twelve months old; and if the patient be unable to swallow, half as much again may be administered by the rectum dissolved in a few teaspoonfuls of water. If necessary, the dose can be repeated two or three times a day. Bromide of ammonium and balladonna are also largely employed in these cases. The former can be given in three or four grain doses every two hours to a child of from six to twelve months old; the second in ten or fifteen drop doses two or three times a day to a child of the same age. Infants are so tolerant of this drug that it should be given to them in a dose which can produce some appreciable effect. In the convulsions of hooping-cough where the spasm of the glottis is extreme, treatment by bromide of ammonium or potassium is especially indicated. The bromides are well borne by quite young children, and we should not fear ill consequences from what may appear a very large dose. Chloroform is often employed, but it is decidedly inferior to chloral and much more troublesome.

If the child has been lately the subject of exhausting discharges warmth should be employed, and stimulants, such as the brandy-and-egg mixture of the British Pharmacopœia, be given energetically. If the convulsive attacks are followed by signs indicative of intracranial mischief, such as stupor, squinting, ptosis, etc., the child should be kept quiet and an ice-bag be applied to his head. In all such cases the treatment must be conducted according to the condition from which the convulsion is supposed to have arisen.

When the convulsions have ceased, and signs of irritability of the nervous system are no longer to be observed, we must take steps to improve the general condition of the patient. His bowels should be attended to, and his diet be carefully regulated. If rickets be present it must be treated. Most children in whom the convulsive tendency exists are benefited by iron, wine and cod liver oil, for their nutrition is usually at fault, and both the alcohol and the iron contained in the wine are beneficial, while the oil is of the utmost value in supplying nutritived eficiencies. Fresh air, too, is of the utmost importance, and the child shonld be warmly dressed and be taken regularly out of doors. *Louisville Med. News.*

SODIUM NITRITE IN THE TREATMENT OF EPILEPSY.

By W. T. Law, M.D., F.R.C.S. Eng.

In addition to the extensive list of remedies employed or recommended in the treatment of epilepsy, I wish to suggest a trial of another which I was led to select upon theoretical grounds in a case of this disease which recently came under my immediate and close observation for eighteen months. As evidence of my facilities for noting the effect of the remedies tried, it is proper to state that the patient, Mr. M., ætat. 29, was received into my own house for supervision and treatment, and that arrangements were made by which any attacks occurring either out of doors or during the night, could be noted. Briefly, the history and condition were as follows:—Patient's father died of apoplexy, but no other family story bearing on nervous disease could be elicited. Mr. M.'s habits were said to have been unexceptionable as regards drink and morals, and there was no suspicion of syphilis. In mind he had always been "below par," and though sent to various schools, learned very little. He had no fits at this time, but suffered from severe headaches, which often kept him in bed. At length he entered a college, and, after a good many years spent in trying to pass examinations, had his first distinct attack of epilepsy about a year and a half before he came under my observation. From that time he had numerous fits, but as he was not under complete surveillance, and the attacks were perhaps mostly nocturnal, it is impossible to estimate their frequency. In the summer of 1880, after a journey to see a relative, he had a seizure, followed by maniacal excitement for some hours, after which he was seen by Dr. Wilks, who recommended careful supervision in the house of a medical man. When he came under my charge I noticed that he was above the middle height, fair and muscularly well-developed; clean shaven, nearly bald, congested face, neck and hands. The latter were nearly always moist and often cold; nails much bitten. Contracted pupils, marked want of intelli-

gence in manner, slow speech, and great deliberation of movement. When walking, he partially extended his arms, as a rope-dancer might, and would touch any object he passed as an aid to muscular co-ordination, while the gait was jerky, uncertain and slightly ataxic in character. His mental powers were enfeebled and memory defective, though he exercised control over his property. In disposition he was reserved and secretive, and would carefully treasure up dirty fragments of paper and other rubbish found in the street. Curiosity and cunning were largely developed, and when a seizure was approaching, uncontrollable fits of giggling occurred. He resented the imputation of ill-health strongly, and clung tenaciously to the hope that, contrary to the opinion of various medical authorities who had seen him, he would shortly be able to resume his college studies. His great dislike of medication and intense desire of concealing his fits when they occurred rendered him difficult to treat, and he would deceive me as to his sensations, condition of bowels, &c., whenever possible. After much trouble I got him to take one daily dose of bromide of potassium, forty grains in the morning, with which I at once began, as a wound on the bridge of the nose indicated a recent attack. From this date, August 9th, 1880, fits occurred at the rate of two a week on an average, but always during the night, until November 18th, when I watched a seizure from the commencement at about 9 p. m. He was dozing over a newspaper held upside down which he had been pretending to read, when a low, peculiar cry indicated an attack. The eyes became fixed and staring, the chin advanced, and the face livid (I noticed no initial pallor). The chest walls seemed motionless and respiration suspended, but a gurgling sound resembling retching closely followed the initial convulsion of the limbs, which began in the arms and legs, which were forcibly extended, the former being rotated inwards and the fingers extended. Both sides seemed equally affected, or nearly so. With this the head rotated strongly to the left, the jaws closed firmly, and the pupils slightly deviated from their usual contracted state. Accompanied by deepening lividity, clonic spasms of the usual kind, and twitchings of the mouth succeeded, and I think most affected the right side. The convulsive stage lasted about twenty seconds, and terminated in relaxation and stupor; saliva, tinged with blood from a bitten tongue, running freely from the mouth. The lividity disappeared, and the pulse, which during the paroxysm had been frequent and tense, was now slowed and softened, and perspiration moistened the skin. The sphincters were unaffected, and I found the urine normal the next day. Thinking the bromide was losing its effect in warding off day seizures I gave borax till December 20th. In this time two day fits and seven at night were noted. Then followed bromide as before, with short intervals of iron aloes, till May 30th, with the result of eleven attacks in the waking and fifteen in the sleeping state. Belladonna in twenty-drops doses with bromides of potassium and ammonium were given till October 30th, when three day and twelve night seizures were observed. Nitrite of sodium in twenty-grain doses was then administered until February 6th, when he passed from under my care. During this period a remarkable improvement took place. Three fits only were noted, diurnal on December 15th and January 10th, and nocturnal December 16th. During these latter months, the gait and general manner showed a change for the better. The giggling which formerly generally heralded a seizure almost entirely disappeared. A disposition to over-eat, and post-prandial drowsiness, greatly lessened, and his friends declared they had never seen him look so well before. Among the few particulars, however, in which but little improvement took place, was one I omitted to mention in its proper place, an offensive exhalation from the skin resembling the odor of corduroy, and differing from any I have observed among mental and nervous cases. To make the effect of remedies more easily apparent I subjoin a tabular statement, in which time is expressed by weeks in round numbers.

The general treatment was uniform, and consisted in careful dieting, restrictive in bulk, absence of all excitement, attention to the bowels as far as practicable, and constant watchfulness to repress the tendency to mischievousness which so often accompanies brain deterioration.

Weeks.	Seasons.	Number of Fits.		Total.	Remedies used.
		Day.	Night.		
14½	Summer.	—	28	28	Bromides of pot. sodium and ammonium.
4½	Winter.	2	7	9	Borax.
23	Winter and Spring.	11	15	26	Bromides, with intervals of iron and aloes.
22	Summer.	3	12	15	Bromides with belladonna.
14	Winter.	2	1	3	Nitrite of sodium.

The object in this paper is to advocate the claim of nitrite of sodium to a trial in epilepsy. One case of course is of little value, and I am far from wishing to do more than suggest a trial; and, as it is not likely to be equally valuable in all forms of this malady, I thought it best to describe rather fully the present case in which it seemed of great service. So far as I am aware, this drug has not been used as a remedy for epilepsy, but, assuming that the nervous discharge or explosion is associated with cerebral anæmia—a view which receives clinical support from the initial pallor of the face and high tension of the radial pulse, as well as from the usefulness of belladonna in certain forms, and of nitrate of amyl during the paroxysm—it seemed natural to look for a remedy capable of influencing the vaso-motor apparatus, and, although I am aware that nitro-glycerine—an agent of this class—failed in the hands of Dr. Gowers, I tried sodium nitrite, a drug whose action

is believed to be similar to that of amyl nitrite, but more persistent, with the results shown in the above table. In this statement the number of seizures only is dealt with, but they really varied little in severity, as I have purposely excluded those slighter attacks of momentary duration which occurred now and then, and were not recorded.

On three or four occasions (under bromides) the bladder and rectum emptied themselves, but, so far as I know, evacuation of the vesiculæ seminales, voluntary or otherwise, was not a feature of this case. The fits nearly always took place after dinner, from 8 to 9. 30 p. m. Mr. M. denied any aura or warning, but I believe headache often heralded a seizure, as did certainly giggling without cause, and drowsiness. He would eat bread in large quantities if allowed, and I am firmly convinced of the truth of Dr. Radcliffe's dictum that epileptics should be rather under-fed than otherwise. It is unnecessary to dwell at further length upon the features of a case which, save in respect of treatment, is of no unusual kind, and I must therefore conclude my remarks with the hope that those members of the profession who have the opportunity will test the value of nitrite of sodium, and the nitrites generally, and make public their results.—*Practitioner.*

THE TREATMENT OF GONORRHŒA.

By J. R. STURGIS, M.D.,

Clinical Professor of Venereal Diseases in the Medical Department of the University of the City of New York.

It is important to bear in mind the distinctions into which the gonorrhœal affections should be divided, according to their seat, viz., urethritis, vaginitis, metritis and the like.

This lecture I propose to devote to a consideration of the local treatment of urethritis in the male as contra-distinguished from the constitutional or internal treatment, which I shall reserve for another lecture.

Many teachers and writers on medicine decry the use of injections under the plea that the cure is worse than the disease, that the use of injections induces swelling of the testicles, inflammation of the bladder, etc. Now, I wish to tell you here, at the outset, that this is unqualified nonsense. There is no better nor more speedy way of curing clap, and of preventing the severe, and, at times, dangerous complications than a proper use of injections. Injections, then, are the main-stay in the treatment of clap; but to derive the most benefit from them they should be given understandingly, and the rules for so doing I propose giving you to-day.

I wish you now to recall some of the points I laid down about the course and progress of a urethritis.

First, as to its course: it begins within the first half inch of the urethra, and invades the deeper portions of the canal continuously; and, secondly, as it attacks the different portions of the canal it goes through the different stages of commencement, stasis and decline, marked by different characters in the discharge.

Some cases of clap, especially first attacks, are attended by a very marked amount of inflammation, in which the penis is enormously swollen, hot and red, and in which micturition is only accomplished with extreme difficulty, and in drops, often accompanied by blood. In such cases the treatment must be antiphlogistic and expectant. Abstraction of blood by the application of leeches to the external abdominal rings, to the perineum, to the inside of the thighs (never to the penis itself), is both proper and effective, and this should be followed by frequent and prolonged douching of the inflamed genitals in as hot water as patient can bear, to the point of producing faintness. In this stage no injections can be used, and it is probably from non-observance of this rule, and from the attempt to abort a clap by using strong injections that these latter have acquired such a bad name. About this abortive treatment of clap I shall have a few words to say in a minute. For the *ardor urinæ* I know of nothing that will afford the unlucky patient more comfort than by making him pass his water under water, *i.e.*, in a mugful of hot water. Drugs internally are of little, if any, service; the two best are the homœopathic tincture of cannabis sativa given in v-x minim doses every two or three hours, or the oil of cubebs, x-xv minims in the same manner. If the fever run high, the use of the tincture of aconite root (Fleming's) ♏j every hour may be used with advantage, but the patient, while using this remedy, should be carefully watched, as the drug is very active and poisonous. The diet should be bland, what is technically called "slops," and all meat, and stimulating food carefully excluded; the drink should be of the same character —milk or water, or the two combined, but nothing else.

When the next stage, that of stasis, is reached, a decided change in treatment takes place.

First, all antiphlogistic treatment is stopped, and the patient is placed upon a good, nutritious diet; no starving now, gentlemen, but a healthy regimen.

The drinkables, however, are not increased; all stimulants, fermented or distilled, are absolutely forbidden, and the patient's liquid refreshment confined to milk, water, and milk and water, or tea and coffee, of which one-half is milk. But more than this savors of evil, and is not to be thought of.

Now is the time for injections, but to be of service they must be properly used. The abortive method, which at one time was frequently tried, I advise you to have nothing to do with. The *modus operandi* was to give one or two injections of a very strong solution of nitrate of silver, and to induce increased irritation in the hope that the greater would remove the lesser. But, vain hope, gentlemen, the course of a clap can seldom be aborted, and the risk run is too great. Severe hemor-

rhage, œdema of the penis, swelled testicle, and stricture, are some of the penalties paid for this experiment, and I pray you, remember, in this, as in some other instances, that with too great haste there may be less speed. We will adopt, then, what is known as the continuous treatment, and the two requisites are a syringe and a medicated fluid for injection.

[Here Dr. Sturgis describes several defective hard-rubber syringes, and then refers to one which meets his approval. The description he gives of it, as will be seen below, fits the "Royal". Excelsior "P" Syringe, illustrated on one of the advertising pages of this journal.—Editor RETROSPECT.]

The last one, C, is the best of all, and combines all the requisites of a good urethral syringe. First, in capacity, it holds about half an ounce of fluid, a quantity needed to distend most urethræ, and to obliterate the folds of mucous membrane in which the discharge is retained; second, its conical end is admirably adapted to put the injection where it will do the most good with the minimum of irritation; there is no nozzle to scrape and tear an inflamed membrane. The apex, as you see, is smooth and even; third, flaring out, as it does, from the very apex, it closes the meatus completely without the necessity of pinching the penis, and the injection does not flow over nor stain the patient's clothing; and, fourth, the piston work easily and smoothly, throwing the fluid into thes canal without producing pain or discomfort.

Now, as to the manner of injecting. Some among you may laugh at the fussiness of these details, but let me tell you that carelessness in this respect has been the cause of many an innocent clap. Before using the injection the patient should be directed to empty his bladder, and the penis should be grasped between the middle and ring fingers of the left hand, the palm looking upwards. This leaves the thumb and index finger free to open the meatus, which should be done laterally, and not from above downwards. The syringe, already charged with the injection and freed from air, is then inserted between the distended lips of the meatus, where it is steadied by the index finger and thumb of the left hand, while the index of the right hand is placed at the end of the piston of the syringe and gently presses the injection into the canal. If these directions are carefully carried out no fluid escapes. As soon as the urethra is well distended the syringe is rapidly withdrawn and the fingers of the left hand stationed at the meatus are approximated, closing the canal and retaining the injection within, while with the fingers of the right hand, now released from duty, the floor of the urethra is stroked from *behind forwards* to press the injection towards the fossa navicularis, where during the early stage the disease is situated. In the later stages of gonorrhœa this process is reversed, as the disease then lies further back.

The injection is the next thing to be considered, and the simpler it is the better. There are two which I commend for use, viz., the acetate of zinc and boracic acid. They should be used rather weak at first and increased as occasion requires, but should never be made so strong as to produce severe smarting. All that is requisite is a slight degree of warmth for three or four minutes duration. The following formulæ are the best:

℞. Zinci acetatis...0.12—0.36—(grs. 2 to 6)
Aquæ distil.....30 (℥ j).
and
Acidiborac...0.48—0.96—(grs. 8 to 15)
Aquæ distil.....30 (℥ j).

In addition to the local methods an internal treatment is employed, the consideration of which we will take up at the next lecture.—*Medical Gazette.*

FOREIGN BODIES SWALLOWED.

At a recent meeting of the Boston Society for Medical Observation (Boston *Med. and Surg. Jour.*) Dr. Reynolds introduced the subject of swallowing foreign bodies, and said: The profession possesses in its classical treatises accounts of an endless variety of foreign bodies that have passed in safety through the alimentary canal. When, however, unusually large or very ill-shaped bodies are to encounter the delicate structures of the intestine in very young subjects, the attendant often finds it hard to put once more unlimited confidence in the natural powers. It is, therefore, perhaps not unwise to place on record any such instances.

A girl of eight years, holding between her lips a smooth, oblong stone, as large as the last phalanx of an adult thumb, suddenly threw herself back on the floor, and in doing so swallowed the stone. The enemy was voided at stool between forty and fifty hours later. The child ate heartily after the accident, took no medicine, and suffered neither pain nor disturbance of health. Unfortunately the stone cannot be exhibited, as the nurse, thoughtlessly, threw it away. It was, however, well known, and was easily recognized.

Dr. H. I. Bowditch related a case in which a little girl, three years old, swallowed a leaden button. The parents, being much alarmed, gave her, with the consent of a physician, a dose of castor oil. Afterwards nothing special was done, and at the end of a week the button was passed from the anus without suffering. Dr. Bowditch said that in his opinion the oil was unnecessary. Certainly repeated dosing, from the liability to produce ill health, should be avoided. A plenty of substantial, rather loosening food, so as to keep the bowels easily and normally opened, was better. Bullets often lie in various parts of the body, and are harmless. Why, then, be alarmed in such a case as the above?

Dr. Brown said it was bad practice to give cathartics or watery substances in such cases. The aim should be to solidify the fæces so as to envelop the object, and milk would be a good diet for this purpose.

Dr. Ingalls reported a case in which a man had swallowed a peach stone. It had come as far as the rectum, but could not be passed further. As it was too high to be reached with the finger, the patient was etherized, and the stone was extracted by the aid of forceps.

Dr. Bush said that it was the custom with persons who attempted to pass spurious coin to swallow them, often, to avoid detection. In such cases their diet was composed of hard-boiled eggs, they having found by experience that this diet rendered the foreign body harmless, by enveloping it in a coat, and in about three days the coin would be found in the fæces.

Dr. Fitz said that if the junction of the pharynx with the œsophagus was the narrowest part of the alimentary canal, anything which will pass this point will pass through the other parts without trouble. Hence if a body of good shape has been actually swallowed, no alarm need be felt.

SUBCUTANEOUS INJECTION OF ETHER IN PNEUMONIA.

From experience in fourteen cases, Dr. Barth, *Lyon Med.*, strongly advocates the subcutaneous injection of about one gramme of ether in adynamic pneumonia. Almost instantly respiration becomes easier, pulse gains in strength and fullness, while the color of the face becomes more natural. In two or three minutes the ethereal odor is noticed in the breath, showing that the volatile liquid has reached the air passages. It is necessary to use the injection at least twice a day, and in severe cases four doses may be thus administered in twenty-four hours without inconvenience. Dr. Barth has not exceeded this dose, nor has he experienced any trouble from the punctures, in the way of serious irritation.—*Glasgow Med. Journal.*

TREATMENT OF PUERPERAL MASTITIS BY IODIDE OF LEAD OINTMENT.

The breast being thoroughly dried and perfectly cleansed, we smear its surface with the officinal ointment of the iodide of lead, and then gently rub it in until a considerable quantity is absorbed. Soak a piece of sheet-lint, of a size sufficient to cover the breast, in the following solution: acetate of lead from ʒ ij to ℥ ss to the pint, of a one-to-four solution of alcohol. If we desire a more elegant preparation, eau de cologne may be substituted. If there be much pain, it is often used to apply an ice-bladder upon the sheet-lint covering the breast. The lint should be frequently dipped in the lead lotion. The following phenomena will present themselves: first, a cessation of pain, fullness and uneasy feeling of distention, which is so annoying. It is common for the patient, who has been exhausted by pain, and consequent loss of sleep, to fall into a refreshing slumber even after the application is made. In the course of three or four hours, the breasts may be completely emptied by an experienced hand. The ointment should be used as a lubricant during the manipulation. By applying the iodide freely twice, or thrice, daily, the secretion will be gone in less than one week, as a rule. The pivotal point in the treatment is the use of this ointment; the evaporating lotion, and cold being only adjuncts. I have proved by repeated trials that, when applied alone, it is capable of exerting an absolute control over the secretion. I believe we here invoke a specific action from the lead iodide. A point of considerable moment is the partial anesthesia it is capable of inducing, which thus enables us to empty the glands, where before even slight pressure was badly borne. Its action without doubt extends to the epithelial cells and inhibits their secretory activity, as is seen in its action, in cases like the above, in causing the drying up of the secretion.

* * * * A word as to the use of belladonna. I must confess that I have met with poor success from its employment. My experience may have been exceptionally unfortunate, but reasoning from it alone, I could not recommend it as capable of accomplishing more than the expectant treatment—*Dr. Thomas T. Gaunt, in American Journal of Obstetrics*, October, 1882.

MIDWIFERY IN THE SANDWICH ISLANDS.

The brother (non-medical) of one of our members resident in Honolulu, gives the following description of the *modus operandi* of the Hawaiian midwife. "The midwives here are for the most part men—usually old men. When the woman's time draws near and labor commences, she is placed sitting on a man's knee with her back to him. He then clinches his hands over her abdomen, and with all his strength hugs the woman, until the child is actually forced into the world, falling to the floor between the operator's feet. The umbilical cord is then cut, and always left very long. Then the woman is placed upon her feet, and the midwife takes her tongue, and draws it steadily until she gulps, or retches, this action causing the prompt ejection of the after-birth. After this she goes and flounders about in the sea, and returns to land, ready for such domestic duties as may fall to her lot or inclination. Native children are—as may be inferred from the way in which they are introduced to existence—very easily born; but should the baby stick at all, or make any bother about being born, then the mother knows it is going to be half white, as this latter kind of baby is so much bigger in the forehead. It is a wise child that knows its own father in this country. So well recognized is this fact that natives never ask, 'who is your father?' but only, 'Who is your mother?' when they desire any acquaintance with one another's genealogy."—*Brit. Med. Journal.*

TREATMENT OF GONORRHŒA BY INJECTIONS OF SULPHUROUS ACID DILUTED WITH WATER.

For some time I have treated all cases of gonorrhœa with injections of sulphurous acid diluted with water, and as the results in my hands have been very satisfactory, I write in the hope that others may be induced to give this method a trial.

I do not offer any theory on the subject, I simply state the fact that I have now treated sixteen cases of gonorrhœa, using no other medicine, and they all returned to duty in an average of six days. I have not observed a relapse or any bad effect. The majority of the cases were second attacks, but those suffering from primary attacks of the the disease recovered equally fast.

When I commenced this method of treatment I used much stronger injections than I do at present. I find sulphurous acid one part to fifteen of water quite strong enough for most cases. The rules of treatment I recommend are: place the patient on low diet, and administer injections of sulphurous acid diluted in water one to fifteen, three times a day, no other treatment being necessary. I find it is necessary for the attendant to give the injections, for if it is done by the patient it is never well done, most of the fluid escaping back outside the nozzle of the syringe. The injection should be kept in the urethra from three to five minutes. If the patient complains of much pain, or if there is a tendency to chordee, it will then be sufficient to administer the injections once or twice in twenty-four hours.

If these instructions are strictly followed the purulent discharge will become scanty at the end of the first day, and on the third it will be replaced by a thin, gleety discharge, which also disappears in a couple of days. While this watery discharge lasts I usually administer only one injection daily. I find that the first injection frequently causes pain, which is not so much complained of afterwards.

I, therefore, in a few cases give the first injection very much diluted—one in twenty, afterwards using one in fifteen. It is necessary to see that the sulphurous acid is fresh and good before it is diluted to the required strength—*W. D. Wilson, M.B., in London Lancet.*

TO HASTEN THE ACTION OF QUININE.

Dr. Starke, in *Berliner Klin. Wochenschrift*, advises that before swallowing powder or pills of quinine, a weak tartaric acid lemonade be taken. This procedure not only greatly accelerates the solution and absorption of the quinine, rendering its physiological action much more prompt, but also obviates that unpleasant gastric irritation so common after the administration of large doses of this drug.

THE TREATMENT OF CROUP WITH "HYDRARGYRI SULPHAS FLAVA."

In 1880 Dr. Fordyce Barker, of New York city, published an article in *The American Journal of Obstetrics* on the treatment of croup which was thorough, indeed exhaustive in character, and elicited favorable comment at home and abroad. The chief reliance of Prof. Barker was upon the therapeutic properties in such cases of the turpeth mineral.

His reasoning, to my mind, was so clear, and his success so uniform, indeed, wonderful (for he tells us for twenty years since he began the use of this drug in croup, he has not lost a case), that I was determined to give the agent a fair and impartial trial.

Dr. Barker insists upon the early administration of the drug; indeed, he regards it of the first importance that it should be given in the very incipiency of the attack, and in order to meet this early necessity, he advises the families in which he is the medical attendant to keep turpeth mineral powders in three-grain doses always at hand, and to give one at the very beginning of the attack. For twelve years, after the manner of Dr. B., I have been using the turpeth mineral in the treatment of this disease, and I have, since the adoption of this plan, lost no case of croup.

My treatment has been, immediately upon being called to a case, without stopping to interrogate very closely as to whether I have a croup reflex, catarrhal, or true croup, to administer at once a dose of the agent (from two to five grain, according to age) in honey, syrup, or sugar of milk, and if there is no decided emesis within fifteen minutes, to repeat the dose; and I have never known it to fail to vomit at the second dose; almost immediately a satisfactory response is secured by the first administration. The vomiting is usually free, without effort, and without depression. The powder is tasteless, small in bulk, prompt in action, and thorough in effect.

The virtues claimed for it are sedative and revulsive. "It depletes the mucus, which is thrown up; it removes from the larynx, by the forced expiration which it causes, any albuminous or fibrinous exudation which may be there in diffluent state, and which, by remaining, may become, subsequently, pseudo membrane; it acts as a powerful revulsive, and thus diminishes the capillary circulation in the trachea and larynx; and thus it becomes a most effective agent in arresting the inflammatory forces."

If the croup persists after removing the causes of reflex action, then, of course, other therapeutic agencies will need to be essayed; but throughout the attack, be it short or long, whenever the breathing becomes suffocative from the accumulation of mucus in trachea of larynx, I give the turpeth mineral in the manner and according to the conditions and plan above designated.—E. R. Duval in *Ark. State Transactions.*

TREATMENT OF PHTHISIS.

W. H. Hughes, M.D., in the *Medical Bulletin*, in an article entitled "Treatment of Phthisis," writes: While there has been advancement in the knowledge of the cause and symptoms of phthisis, the treatment has not progressed sufficiently to enable us to control its terrible effects to any degree. Having a large number of applicants suffering from this malady he has adopted, after devoting considerable time and study to the various modes of treatment, a method which he has employed in practice and from which he has obtained valuable results. The agent he employs is petroleum mass. It acts as an anodyne alternative, and reduces the irritation and inflammation of the bronchi and trachea, relieves the cough, and by its healing and soothing qualities prevents further destruction of the organ. When an abscess has formed, a cicatrix may be secured which enables the lung to resist the deposits from becoming embedded in the tissues, and prevents the formation of additional abscesses. Out of nearly one hundred cases Dr. Hughes has treated during the last thirteen months, there were but three whom this remedy would not relieve. Seven died, and sufferings were greatly relieved by the use of this remedy. The formula used is petroleum mass, one ounce; powdered cubebs and dover's powder, each half an ounce; sulphate of cinchonidia, two drachms; make into pill mass. Divide into four grain pills; one every three or four hours. The following results are to be expected from its use: Diminished expectoration, alleviation of the cough, cessation of night sweats, disappearance of tightness and soreness of the chest, gradual restoration of appetite, digestion and strength. As no living thing can exist in petroleum oil, may not the favorable results of this remedy be due to its action on the microscopic parasite?—*Chicago Med. Rev.*

MINIMUM DOSES OF IODIDE POTASSIUM IN FRONTAL HEADACHES.

Dr. Haley draws attention to the powerful anticephalagic properties of this drug when used in small doses. As a rule, a heavy, dull headache situated over the brows, and accompanied by languor, chilliness, and a feeling of general discomfort, with distaste for food, which sometimes approaches to nausea, can be entirely removed in about ten minutes by a two-grain dose of iodide of potassium dissolved in about half a wineglassful of water, this being quietly sipped, so that the whole quantity is consumed in about ten minutes. This class of headache seems to have no particular or definite cause, belonging apparently to the class of sympathetic headaches. In many cases the effect of these small doses is simply wonderful, and their great advantage is the rapidity with which they act.—*Australian Medical Journal.*

BORACIC ACID OINTMENT.

M. J. L. Championnière recommends an ointment made of vaseline and boracic acid as an antiseptic mixture, which can be preserved indefinitely, and is of great value, being non-irritating.

It forms a bland ointment suitable for superficial ulcers or wounds which are not to be irritated; it is applied on a cloth, on salicylated or absorbent cotton batting.

It can be used with advantage as an application for eczema and intertrigo, which, although not parasitic, give rise to lesions containing and keeping them. There is no better topical remedy for the erythema of the buttocks of infants. It is an ointment always clean and aseptic to grease the finger and instruments. Wherever there is an irritated wound it is a most valuable topical application.

Boracic acid is a less energetie antiseptic than carbolic acid; but its action is nevertheless powerful. The author has successfully employed it in very fetid eczemas, and in fetid sweating of the feet. After washing the feet the ointment is applied in the interdigital spaces; the effect is very good.

The following is the formulæ of the ointment:

Boracic acid, finely powdered.....1 part.
Vaseline.....5 parts.

The acid must be very finely powdered and sifted, and not dissolved in glycerine or alcohol, as this renders the mixture irritating.—*Jour. de Med. et de Chirurg. Prat.*

DEFICIENT KIDNEY-ACTION IN ECZEMA.

Dr. L. Duncan Buckley (*New York Med. Record*) states that deficient kidney-action is a common symptom of eczema of the anus and genitals. In this disease the urine is seldom that of health. The most varied conditions may be reported, but a most common one is a copious deposit of amorphous urates. Frequent and imperative micturition is not at all uncommon, and the repeated calls to urinate at night and the itching will often act and react upon each other, rendering sleep almost impossible. For this condition Dr. B. recommends:

℞ Potass. acetatis..... ʒ j;
Tinct. nucis vomicæ..... 3 ij;
Infus. quassiæ..... ʒ iv.

M. Teaspoonful after eating, in water.

This is often continued during the entire course of treatment. A large amount of oxalate of lime is sometimes found in the urine of eczematous patients. The oxaluria may be quickly relieved by strong nitric acid, internally, in doses of about two drops taken after each meal.

THE CANADA MEDICAL RECORD,

A Monthly Journal of Medicine and Surgery.

EDITORS:

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SUBSCRIPTION TWO DOLLARS PER ANNUM.

All communications and Exchanges must be addressed to the Editors, Drawer 356, Post Office, Montreal.

MONTREAL, DECEMBER, 1882.

VITAL STATISTICS AND PUBLIC HEALTH.

The Board of Health of the City of Montreal is deserving of much praise for the persistency with which (under the direction of Dr. Larocque, their health officer, and Alderman Mooney, their chairman) it has followed up the question of Vital Statistics and Public Health. During the past year it held several conferences with the Medical Societies of Montreal, and at the last session of the Quebec Legislature a Health Bill, the result of their efforts, was introduced and reported by Committee, but, as the House was about to close, it did not advance further. In the meantime the Hon. Mr. Chapleau handed over the reins of government to the Hon. Mr. Mousseau, who, in November last, received at the Government offices in Montreal a deputation on health matters. It did not seem to be very clear to the mind of the Premier of the Province of Quebec what powers in such matters were, by the Act of Confederation, relegated to the Local Government. It was accordingly arranged that the deputation should on a certain date proceed to Ottawa and interview the Hon. Minister of Agriculture on the subject; the Hon. Mr. Mousseau, in the meantime, coming to an understanding with the Dominion Government as to its jurisdiction and that of the Local Governments. On the 7th of November the Hon. Mr. Mousseau met the deputation in Ottawa, and informed it that the question of Vital Statistics belonged to the Federal authorities, and matters of Public Health to the Local Parliaments. He subsequently accompanied the deputation to the Hon. Mr. Pope, Minister of Agriculture, who, after hearing their opinions, stated his own very great interest in the subject, and promised to do something to meet their views at the approaching meeting of the Dominion Parliament. In the meantime the Montreal Board of Health put itself in communication with Charlottetown, P.E.I., St. John, N.B., Halifax, N.S., Quebec, Montreal, Ottawa and Toronto, and, after exchange of correspondence between these points and the Government, the latter asked that a deputation from these various centres should, at its expense, proceed to Ottawa, and, after conference, lay the result of their united deliberations before them. The deputation assembled in Ottawa on the 7th of December last, to the number of about fifty, and held two long sessions in the Russell House, the chair being occupied by Alderman Mooney, chairman of the Montreal Health Board, the result being the adoption of the following resolutions:

Resolved.—That, in the opinion of the meeting, in order the better to prevent disease and preserve human life, it is advisable that the Dominion Government should organize and sustain a uniform system of vital statistics for the Dominion.

Resolved.—That, as immediate action is necessary, the Federal Government be invited to initiate at once a system of vital statistics, where organized Local Boards of Health are established, so that the statistical information may be utilized by these bodies.

Resolved,—That, as Provincial legislative action is necessary, it is suggested to the Federal Government that it communicate with and secure the co-operation of the Provincial Government to pass such legislation as will harmonize with and obtain the object of the preceding resolutions.

Resolved.—That it is desirable that a central bureau of statistics be established, and, if found to be within the province of the Federal Government, a comprehensive system of health returns.

The following day, December 8th, the deputation proceeded to the Railway Committee room in the Parliament buildings, and met the Hon. Sir Charles Tupper, M.D., who, after reading the resolutions, stated that in his opinion they were to be commended for their very moderate tone. He then said that when he left London, just previous to the passing of the British North America Act, he was fully of the impression that matters of public health, like Quarantine, Vital Statistics, and kindred subjects, had been assigned to the Dominion Government. When the Bill passed, and he received a copy of it, no one was more surprised than he was to learn that Public Health matters have been relegated to the Local Houses. He said he had no hesitation in saying that, in his opinion, this was

a great mistake, a mistake so serious that he felt justified in suggesting to the deputation that they pass a resolution drawing attention to the fact, and suggesting to the Dominion Government the propriety of, at an early day, approaching the Imperial Parliament, with a view of having the Act of Confederation amended in the direction he had indicated. Sir Charles then withdrew. Acting upon this suggestion Dr. F. W. Campbell drew up the following resolution, which was moved by the Hon. Dr. McNeill Parker, seconded by Dr. Campbell, and carried unanimously :

Resolved.—That, inasmuch as it appears by the British North America Act that matters of public health are relegated to the Local Government this delegation has not included it with the subject of Vital Statistics ; nevertheless they are of opinion that it would have been better had it been under the direction of the Federal Government, and beg to suggest that an effort be made to obtain an amendment to the constitution in that direction.

The Hon Mr. Pope, Sir Charles Tupper, M.D., and the Hon A. P. Caron, then entered the room, when Alderman Mooney in a few words stated the object which the very large delegation had in visiting Ottawa, and then presented the resolutions. Hon. Mr. Pope said that he was deeply interested in the subject, and, as his ideas were of course crude, he felt deeply indebted to the delegation for the valuable assistance they had given him in the resolutions which they had presented. He would lay them before his colleagues, of whose sympathy and co-operation he felt assured. Sir Charles Tupper and the Hon. Mr. Caron also spoke, the former alluding in forcible terms to the financial saving which the country might gain by a proper use of the information obtained through the collection of vital statistics. He believed no more important subject could engage the attention of a Government. The delegation then withdrew, and almost immediately afterwards met at the Russell House, when Dr. Taché, the Deputy Minister of Agriculture, laid before them a scheme for the collection of vital statistics, which he had prepared at the direction of the Hon. Mr. Pope. At present it is intended to confine their collection to cities of about 25,000 inhabitants, and to gradually extend the operation of the scheme to other places, and eventually to embrace the whole Dominion.

The cost of the collection from the principal cities is estimated at $15,000, which sum it is understood will be voted at the forthcoming meeting of Parliament. No new legislation is required on the subject, as, under the Census Act of 1879, the Government has the requisite authority.

We consider that much has been obtained by the united efforts of the last delegation, which was a most influential one. If the Government will but put into operation the ideas of the convention, which views seemed to meet with the full sympathy of the members of the Government who were present, Canada will before long be free from the reproach which now attaches to her, of not taking an active interest, in the sanitary welfare of her population. In no small degree will credit for this be due to the members of the Montreal Board of Health, who, while working for their own interest, have shown a breadth of view which we might suggest it would be well if some other portions of the Dominion were to imitate.

We had almost forgotten to mention that the Hon Mr. Pope entertained the members of the delegation to a sumptuous banquet, at the Russell House, on the evening of their arrival. The toast of the host was proposed by Dr. F. W. Campbell, and the Hon. Mr. Pope in replying said that, concerning the details of the great question which had brought them to Ottawa, he was comparatively ignorant, while to his guests it was one with which they were quite familiar. He hoped they would be moderate in the demands which they would make, but that before a great while the country would become educated upon the question, when a full and complete scheme might be put in operation.

STUDENTS' TROUBLES.

Medical students it seems have their troubles as well as other people. The Royal College of Physicians and Surgeons of Kingston, perhaps better known as the Medical Faculty of Queen's College, have this year (and we think also last year) among their students seven ladies. The relationship between them and the male students seems to have been at least fairly cordial till a week or two ago, when the ladies took umbrage at something uttered in the class of Physiology, and in a body left the class room. Immediately the male students were up in arms, and insisted that females should not be taught with them. For a brief period the Faculty were firm in resisting the demand. The male students were equally determined, and decided to leave the school in a body if their request was not granted. They telegraphed their situation to all the other medical schools in Canada, some of

which offered favorable terms. This brought the Faculty to a full realization of their position, and the flank movement of the students was successful, the Faculty granting all they asked. In future male and female students will not study together in Kingston. We think the decision a wise one. If females will become doctors, and the public think they should, then they must be educated alone. Capital is being made of the fact that one school insisted upon the students at Kingston having their three months attendance certified before accepting them. This, of course, was simply refusing them, and Kingston has a right to feel grateful, but that does not prove that the other schools who offered better terms did wrong. We believe each school knows best how to conduct its own business, and acted accordingly. It was their action which brought the Kingston Faculty to terms, and perhaps in the long run it may turn out that after all they caused the Royal College of Physicians and Surgeons of Kingston to act in a way which will redound to their best advantage.

The Primary students of McGill Faculty of Medicine have this month revived in a spirited way a grievance which almost every year for the past twenty-five years has come to the surface. They complain that the lectures given by the Rev. Dr. Wright, Professor of Materia Medica, are not such as they require; that they are by far too minute, and that as they cannot find the matter in books they have to depend upon notes. These they cannot take as the Professor lectures too fast. They have petitioned the Faculty, but this has been done before, and has never resulted in any improvement, because, if we understand the matter right, the Faculty are powerless to act. They intend also to petition the Governors of the University, and we hope these gentlemen will deal with the matter as it deserves to be dealt with. We sympathize with the students because we know that the grievance is a real one. Our only wonder is that it has been allowed to continue so long.

OBITUARY.

Dr. R. H. Russell, a distinguished physician of Quebec City, died on the 7th of December. Although in poor health for some time, he continued practice up almost to the time of his death. Dr. Russell was for many years a Governor of the College of Physicians and Surgeons, and had filled the Presidential chair. He was an M.D. of Edinburgh University.

Dr. J. R. Dickson of Kingston, Ont., died late in November. He had for several years been laid aside from active work. He came to Canada in 1837, having received his medical education in Glasgow and Belfast. In 1854, when the Medical Faculty of Queen's College was organized, he was elected its President and to the chair of Surgery. Up to his death he took a warm interest in its welfare. He was the first President of the Ontario College of Physicians and Surgeons.

THE ANNUAL MEDICAL DINNERS.

Hitherto in public estimation noise and boisterous conviviality have generally been considered characteristic features of Medical Students' Dinners; not because improprieties were more common or glaring than in other similar gatherings, but because the reputation for recklessness and dissipation earned by medicos in years gone by has ever since clung pertinaciously to them, no matter how well-regulated their conduct may now generally be. In order to improve the reputation and elevate the tone of Students' dinners, many medical schools have instituted an *Annual Medical Dinner*, where students, graduates and professors meet on equal terms to enjoy friendly social intercourse; and that the very suspicion of reproach may be obviated, the dinner is usually conducted upon temperance principles. Last year Bishop's College inaugurated this plan in Montreal with decided success; this year both Bishop's College and McGill held an annual medical dinner upon temperance principles at the Windsor Hotel, Bishop's on the 13th and McGill on the 18th inst. Besides students, graduates, professors and representatives from other colleges, the Consul-General of the United States and many prominent citizens were present as invited guests. If a good dinner, good music, good songs and speeches, and general good humor are any indications of success, both these reunions must be pronounced eminently successful.

COLLEGE OF PHYSICIANS AND SURGEONS, PROVINCE OF QUEBEC.

Drs. Henri J. Girouard, of St. Johns, P.Q., Herbert E. Shepherd, of Portage du Fort, and Henry Harkin, of the city of Montreal, have been registered under the new law.

John Bishop, over 25 years practicing medicine in the township of Dudswell, county of Wolfe, has been prosecuted as an unqualified practitioner, has paid the fine, and promised to not practice any more.

A second action has been taken out against a man by the name of Joseph Rendpré, residing at Ste. Anne de la Perade. This unqualified practitioner paid a fine in June, 1881.

Two actions have been taken out against a man named Isidore Provençal, residing in the parish of Windsor Mills, county of Richmond. One of these actions is for acting as an accoucheur, and the other is for the illegal practice of medicine.

CALENDARS OF BISHOP'S COLLEGE.

If any of the readers of the RECORD have in their possession copies of the fifth Annual Announcement of Bishop's College Faculty of Medicine, the Faculty would feel obliged by their being sent to the Registrar. College announcements were at one time thought not to be of any value, after the Session for which they were issued had passed. Their importance as historical records is, however, now recognised, and quite a number wish to complete sets.

A NEW SIGN OF PREGNANCY.

The *American Journal of Obstetrics* says that Jorisenne (*Arch. de Tocologie*) has furnished a sign by which we can diagnose pregnancy during the first two months. Starting with the assumption that in pregnancy there is a hypertrophy of the heart (and this assumption, if erroneous, will not affect Jorisenne's results), he has found that, while in health there is a variation of from ten to twenty beats in the radial pulsation, according as the body is upright or horizontal, in pregnancy, no matter what the position, the beats number the same. Jorisenne has been able to diagnosticate pregnancy as early as the first month, when no other sign except the missing of a menstrual period was present. When examining a patient for this sign, it is necessary to proceed with deliberation, first counting the radial for the space of fifteen seconds while the patient is standing, then sitting, then reclining. The order may then be reversed, and uniformly the same number of beats will be recorded. Jorisenne promises an explanation of this phenomenon in a future paper.

PERSONAL.

Dr. H. E. Poole (M.D. McGill, 1880) has located in Ormstown, Que.

Dr. J. C. Shanks (M.D. McGill, 1881) has settled in Howick.

Dr. J. W. Cameron (C.M., M.D. Bishops, 1882), lately House Surgeon to the Woman's Hospital, has commenced practice near Brasher Falls, N.Y.

Dr. Prendergast (C.M., M.D. Bishops, 1882) has his shingle out at Cote des Neiges, near Montreal.

Dr. Jameson (M.D. McGill, 1877) is President and Professor of Chemistry of the University of Kansas City.

Dr. Wilkins, Professor of Physiology, University of Bishop's College, has been appointed Examiner in Physiology and Pathology at the University of Toronto for the year 1883.

Drs. Sullivan and Lavallé, of Queen's College Faculty of Medicine, were in the city a few days ago, and were well taken in hand by several of our Medicos, and shown all worth seeing in our city. We believe they return home with a high estimation of the genial hospitality of Montreal's medical men. The "female students" were, to use an American phrase, the means of their having a visit to our city and have a "good time."

HOSPITAL REPORTS.

OCCURRING IN THE PRACTICE OF THE MONTREAL GENERAL HOSPITAL.

CASE OF EMPYEMA—EXCISION OF RIB.

Under the care of Dr. Wilkins.

Reported by Dr. W. T. DUNCAN, House Physician.

Felix L. was admitted into Hospital 9th May, 1882, complaining of cough, dyspnœa, and pain in the left side. Ten weeks previously, he had a chill, followed by severe catching pain in left side, slight hacking cough and elevation of temperature. Has been laid up ever since, losing flesh, but free from chills and sweating.

Patient is a large man, but much emaciated.

Left Lung—Percussion note is flat over left side of chest, both front and back. Breathing is blowing above second rib in front, and scarcely audible below this point. Behind it is feeble and distant, a few moist râles being heard towards the apex. Tactile fremitus absent, vocal resonance dim-

inished, left side of chest bulging, measures one inch more than right side; intercostal spaces full.

Right Lung—Normal, except an occasional moist râle at the base.

Heart—Displaced slightly upwards and to the right side.

Cough is severe, with copious offensive, dirty-looking, purulent expectoration. Expectoration began suddenly four weeks ago, two pints of pus being brought up in one night. Ever since copious purulent expectoration has continued. Temp. 101°; pulse 100; resp. 38.

Was ordered stimulants, iron and quinine, and cod liver oil.

12th May—Cough is very severe, at least 12 oz. of frothy purulent matter being expectorated in twenty-four hours. Patient cannot lie on right side. Physical signs unchanged; left side of chest was aspirated, 10 oz. of thick pus being drawn off. A free incision was then made into the pleural cavity, with antiseptic precautions, and 41 oz. of bloody purulent matter removed. Owing to the closeness of the ribs, a tube could not be introduced. This wound was dressed antiseptically.

15th May.—Passed a good night. No pain in side. Expectoration during last twenty-four hours was 3 oz. The wound was dressed, and several ounces of fluid were discharged.

19th May.—Wound is dressed daily, 2 to 4 oz. of matter coming away each time. Cough is less, and temp. normal.

25th May.—Wound has been closed by granulation for two days, and pain is again felt in side. Percussion is dull, and breathing very weak over lower portion of left lung; a few clicking râles at the apex.

27th May.—Under ether, Dr. Wilkins excised two inches of the 6th rib, making an incision parallel with the rib between the nipple and axillary line. Several ounces of purulent matter came away. A large silver tube was introduced and dressings applied, the pleural cavity to be washed out daily with Carbolic Acid Solution 1×100. Antiseptic precautions were not employed.

In two days the temperature fell to normal and the patient began to improve. In three weeks a soft rubber tube was substituted for the silver one, the discharge having fallen to about 1 oz. daily. A stronger carbolic solution (1×80) was now employed and the cavity washed out twice a day, with the result of removing all fœtor from the discharge. The improvement was thenceforth rapid; cough disappeared, and breath sounds began to return; four weeks after the operation, patient was able to sit up and walk about; three weeks later the discharge ceased, and the wound was allowed to close up.

5th August.—Percussion note fairly clear, down to the 5th rib, and the breathing audible, though weak. Was discharged from Hospital.

Six weeks afterwards he reported himself in good health, with neither pain nor cough, left side of chest expanding well, and air entering the whole lung freely.

REVIEW.

Lindsay & Blakiston Visiting's for 1883. P. Blakiston, Son & Co., Philadelphia.

The oldest and one of the best Visiting Lists published. We have used it for 20 years, and are thoroughly satisfied with it.

The Medical Record Visiting List for 1883. New York, Wm. Wood & Co.

This useful and handy list continues to maintain its high standard of excellence. Less bulky than most of the others, it is convenient as well as sufficiently complete. Among its new features this year we notice a card-board gauge for Urethral Sounds according to the French and American scales. It may be obtained for either thirty or sixty patients, with or without dates.

USE OF NITRITE OF AMYL IN PARTURITION.

Dr. Fancourt Barnes, physician to the British Lying-in Hospital, and assistant physician to the Royal Maternity Charity, reports in the *British Medical Journal*, for March, 1882, the use of amyl nitrite to counteract the effects of ergot. The midwife hoping to hasten the third stage of labor had given the patient ergot, directly after the child was born, which caused hour-glass contraction of the uterus. The os internum, and muscular fibres above it were so contracted as only to admit a finger. Theumbilical cord had been separated from the placenta. He administered three drops of the nitrite to the patient by inhalation, which immediately arrested the uterine spasm, so that the os, that had been absolutely undilatable, steadily yielded under the influence of the drug, till he was enabled to introduce the whole hand into the uterus and detach the placenta, which was universally adherent. There was no hemorrhage whatever, and the placenta itself presented a remarkably exsanguine appearance.—*Medical Tribune.*

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MEDICO-CHIRURGICAL SOCIETY.

STATED MEETING, DECEMBER 15TH, 1882.

The President, Dr. R. A. KENNEDY, in the Chair.

Dr. Gurd exhibited a patient in whom the expiratory act was of a peculiar interrupted character, the air being expelled in a series of distinc ly audible jerks quite evident to the ear some four or five inches from the mouth. A condition resembling this somewhat has been described by Drummond as a diagnostic sign of thoracic aneurism, and it is explained by pulsation on the trachea. The woman is healthy in every respect, and physical examination fails to reveal any condition likely to give rise to the symptoms.

Dr. Mills said that he had heard slight murmurs accompanying the expiratory act very similar to this after exertion, possibly being transmitted through the medium of the trachea acting as a conducting board.

PATHOLOGICAL SPECIMENS.—Exhibited by Dr. Osler.

I. Lungs from a case of Tuberculosis of Pleura and Lungs.

History.—Mrs. McL., aged 27, admitted early in November to General Hospital under Dr. Ross. Hard drinker, early symptoms of cirrhosis of liver. Hemorrhage from bowels, no ascites, intense tenderness over region of liver. Pleurisy on both sides and signs of tuberculosis of lungs. Left lung covered with a thin fibrinous exudation, thickest at base and near the edges. In places the membrane is studded with minute granular bodies resembling tubercles, which are best seen where the exudation is less abundant. The organ is crepitant throughout, a caseous spot is seen at apex, and a narrow fibroid area in the lower lobe. No disseminated tubercles throughout the substance.

The right lung presents a similar exudation, less abundant than in the left lung. At the apex is a small caseous mass with a cavity the size of an almond in direct communication with a bronchus. In the neighborhood of this are several small groups of tubercles. The lower lobe also presents a couple of small caseous bodies, but no scattered tubercles.

The costal pleura is thickly lined with false membrane, is congested, and presents small gray bodies scattered through the membrane.

Liver.—Weighs 2,200 grammes, is large and pale. Lobules distinct, bile-stained in center. Organ is both fatty and cirrhotic. Other organs normal.

II. *Specimen of Ulceration in Typhoid Fever.*

Clinical History.—I. McI., æt. 35. Attack sudden, onset marked with rigor; admitted to hospital on 7th day. Did well at first, then became delirious, and shewed signs of bronchitis. The "typhoid symptoms" set in and patient died on the 15th day.

Lungs are dark-colored, full in volume, crepitate throughout; lower lobes are sodden and very heavy, and crepitate but slightly. On section cut surface shews much blood. Bronchi shew a dark mucous membrane covered with mucus.

Spleen enlarged, dark and soft intestines.

In the ilium in the upper part one or two small reddish spots a little elevated above the mucous surface. Only one ulcer of any size, this is about 1½ feet from the valve. Several of the Peyer's patches are only injected, and present here and there an isolated swollen follicle. An enlarged patch is next the valve. There are a few solitary glands enlarged and capped with sloughs or presenting small ulcers.

III. *Fibroid Disease extending to the Lung from the Pleura. Cirrhosis of Lungs and Kidneys.*

A. D., æt. 33. In General Hospital under Dr. Ross. Signs of phthisis and dropsy, albumen, casts and pus in urine.

Autopsy.—Anasarca of legs. 1½ pints of fluid in abdomen, turbid effusion in pleura, adhesions on both sides, unusually firm on the right. Heart—Organ is large, especially on the right side. Right ventricle somewhat dilated, walls firm and somewhat increased in thickness. Tricuspid orifice 4¾ in. in circumference. Aortic valves a little opaque and thick, as are also the mitral. Aorta presents a few small patches of fatty change but no atheroma.

Left lung crepitant throughout, lower lobe heavy and sodden; pleura of upper lobe covered with adhesions. About the middle of upper lobe a small cicatricial spot extending from the pleura into the substance. In this is the small cavity of a dilated bronchus.

Right lung small, especially at the lower part. It is very intimately adherent to the diaphragm, and the diaphragm at that part to the liver. The pleura covering the lower half of the lung is much thickened. In places nearly 1 c.m. thick, averaging about 5 m.m. The diaphragm, pleura and lung form one dense firm mass.

On section through the lung the upper lobe is crepitant and healthy looking. The lower lobe presents numerous fibrous bands passing into it from the thickened pleura, constricting the lung and greatly diminishing the volume of the lower lobe. Close to the pleura the tissue is quite fibroid and airless. In the deeper parts the tissue between the fibroid septa still contains air. The organ presents a beautiful example of fibroid disease extending to the lung from the pleura.

Spleen a little enlarged; pulp soft; kidneys small; capsule detaches without difficulty; surface irregular, and presents numerous coarse granules and several cysts. On section organs are firm. Cortex much reduced, in some places only 2 m.m. thick. It is pale, and presents a few opaque spots. The pelvis of the left kidney is in a state of inflammation extending into the calices. Liver closely adherent to diaphragm. Presents a small fibroid area at a spot corresponding to the fibroid disease of the lung. Substance pale and a little tough, but presents no marked alteration.

Nothing of note in other organs.

Dr. Alloway exhibited a specimen of a placenta, removed by the Uterine Curette, with the following history:

Patient aged 41, married 20 years; has had 10 children at full term, and 4 miscarriages (2, 3, 5 and 5 months respectively), 14 pregnancies in all. She is now in her 5th month of pregnancy; has had metrorrhagia for the last five weeks with occasional pain. On the 10th inst. Dr. Alloway was sent for. Found membranes protruding through the os, with the embryo contained within. The internal os was fairly well dilated, but could not introduce finger beyond it, notwithstanding the use of considerable pressure outside in an endeavor to force the uterus low down in the pelvis. The pain would have been intense without an anæsthetic. The embryo was removed. No protruding placenta could be reached with the finger, but concluded it must be firmly attached to the uterine wall. So firm and complete were the adhesions that considerable difficulty was experienced in endeavoring to find a part sufficiently detached to insert the curette. When this point was gained the whole was detached without any further difficulty. During the operation the patient was placed across the bed on her back, with her feet resting on Dr. A.'s knees. No pain whatever was experienced, and the operation occupied about twenty to thirty minutes. The patient was placed on M. x. Ext. Ergot. fld. three times a day. Recovery was complete in ten days. Dr. Alloway remarked that his chief object in exhibiting the specimen was to point out the complete form of the placenta removed and the fibrous condition of its tissues. That the embryo must have been dead seven or eight weeks judging from its size, and the utter impossibility of the uterus being relieved of its contents without the aid of the curette or an anæsthetic.

That the use of the tampon and the expectant plan of treatment would have ended in septicemia and probably loss of the patient's life.

Dr. Trenholme urged the great value of the finger, and preferred it to any instrument. By hooking the finger over the inner os, and pressing down over the fundus externally, almost every case could be easily managed; in fact, he had never met with a case where the finger failed to remove any adherent placenta in early abortions. Where the abdomen was difficult to depress, chloroform gave perfect command of the patient. In this connection Dr. Trenholme remarked that he had a case where the dead fœtus was retained as a sessile tumor for six or seven months, the woman having monthly hemorrhages until it was removed. This form of hemorrhage during gestation is due to non-union between the *reflex* and *uterine* deciduæ.

Dr. Gardner testified to the value of the vulcellum. In many cases it is very difficult to force the uterus sufficiently low down, and it is much more easily brought within reach by fixing one lip with the vulcellum, and then drawing the uterus down. He has never used the curette. As a rule he can succeed perfectly with the finger, which he prefers to the curette, but no doubt cases will occur where the removal of the attached membranes is facilitated by the curette.

Dr. George Ross said that it was most important that an anæsthetic should be administered, after which the uterus can be forced down with comparative ease in many cases where otherwise it would have been quite impossible; he also spoke of his preference for the finger as compared to the curette in these cases.

Dr. Cameron as opposed to Dr. Alloway, who invariably uses ether as an anæsthetic, held that chloroform was much better, and spoke of a case where, owing to rigidity of the parts from the former, the removal of the contents of the uterus was rendered impossible until chloroform was used, when it was easily effected.

Dr. F. W. Campbell also spoke of the advantage of the finger over the curette, and of the assistance rendered by the use of the vulcellum.

Dr. Fenwick exhibited the portions of bone removed at an operation for excision of the knee-joint performed by him that day. The patient, 21 years of age, gave an account of an acute synovitis in the knee-joint twelve years before, following cold or some very indistinct injury, and frequent attacks of more or less severity ever since. On consulting him the joint was swollen, loose and tender, and there were severe starting pains at night. At the inner side of the head of the tibia it was very tender, and possibly the disease commenced in the periosteum at that point. On cutting into the joint the semilunar cartilages were found destroyed, and the cartilages of the femur gone; erosion of the bones and a fringed condition of the synovial membrane.

The usual form of operation was followed, rounding off the end of the femur and hollowing out the tibia, not more than 1¼ inch of bone was removed. Dr. Fenwick remarked that the great advantage in children was to save the epiphysis, and thus benefit by the growth of the bones.

Dr. Mills explained the method of demonstrating the urinary pigments, and exhibited specimens illustrating the different steps in the process, which latter are as follows:

About 50 c. c. of urine suffices to show the reactions clearly. (1) Urine treated with strong solution of acetate of lead and a few drops of ammonia and filtered.

(2) Pasty mass remaining on filter, treated with strong sulphuric acid and a little alcohol and filtered.

(3) To the yellow filtrate is added excess of strong sulphuric acid and boiled.

(4) The resulting dark fluid is then diluted with a large excess of water, and allowed to stand; a flaky black precipitate (very soluble in ammonia) deposits. This is diromelamine, a resultant product of the decomposition of urochrome.

Dr. Gardener then read a paper on *Cases of Procedentia Uteri*, with the view of giving an account of the experience he had had at the *University Dispensary* and in private practice, of this condition, illustrating its nature and treatment. He included under the head of *Procedentia Uteri* those cases of elongation of the supra-vaginal cervix, with protrusion or descent of the vaginal wall through the vulva. In a large majority, 10 out of 13 of the cases reported, this condition was present. As to the nature of this elongation he thought there could be little doubt of its being in the main due to a "tensile elongation," as Matthew Duncan calls it, of the supra-vaginal portion of the cervix through primary descent of the vagina and bladder, and in some cases leading to a remarkably extreme degree of elongation and thinning of this portion of the cervix. *Huguier*, who was one of the first to call attention to the subject, held it

to be a true hypertrophy. "*Allongements Hypertrophique du col de l'uterus*," but from facts adduced from the experience of *Fritsch*, and from the cases cited by the reader of the paper, such a view would seem to be disproved. The great majority of the cases reported occurred in women from six to sixteen years past the menopause, and in whom senile involution, as well as stretching, was a factor in the production of the condition. The opinion that it is a stretching is also borne out from experiments on the cadaver; and furthermore on the living subject when the parts are replaced and retained, and all traction force removed, the stretched cervix in a short time retracts, becomes shorter and thicker.

In regard to the treatment of Procedentia Uteri by surgical measures, Dr. Gardner held that although valuable, as such operations were in certain cases, yet they were often unnecessary and inexpedient, always uncertain in their results and in some cases positively dangerous; and while thousands of women can be so thoroughly relieved of their symptoms by pessaries they will not listen to any proposal to perform an operation. Dr. Thomas of New York states that in a certain number of cases where traction of the prolapsed vagina, rectum or bladder is the cause of the uterine displacement, operation should be the chief resource; but if a heavy uterus presses down of its own weight, or is forced down by pressure from above, closing the perineum or contracting the vagina by colporrhophy is illogical, unnecessary and empirical.

In reference to the many forms of pessaries in use to keep the prolapsed uterus within the pelvis the great principle to be observed is that they fulfil their purpose with as little distension as possible of the vagina. The Gehring pessary, with which Dr. Gardner has had most experience, he has found to answer admirably in a number of cases and fulfil in an important way the above-mentioned general indication in the use of pessaries. It supports the cystocele very effectually, and in this respect has no equal. One objection, however, from which it is not free is that it interferes with marital relations, but that it does not positively prevent coitus is shewn by instances of conception in patients wearing the pessary.

In reply to Dr. Campbell, Dr. Gardner remarked that he used and believed in the utility of tampons soaked in an antiseptic and astringent solution, such as that recommended by Bell of Glasgow, in the treatment of recent cases of prolapse of mild degree. Intravaginal pessaries were in many cases quite ineffectual where the object in view might be attained by a pessary with an external support, such as the Cutter cup or ring.

In reply to a remark from Dr. Trenholme, to the effect that he preferred the Hodge to any other pessary, Dr. Gardner said that he believed that there were cases in which the Hodge retained the parts, but there were others in which it failed, where the Gehring pessary succeeded admirably. It fulfilled one important indication, viz., that it supports the cystocele much better than any Hodge pessary could, without unduly distending the vagina.

In reply to questions from Dr. Roddick and others Dr. Gardner said he would certainly operate in suitable cases, such as those in which pessaries were not borne; when the patient was past the child-bearing period; when the uterus was not inordinately heavy, and therefore likely to again force its way gradually through the narrowed vagina; and when the patient's general health was good enough to warrant reasonable expectation of primary union; and, lastly, when the patient could spare the (sometimes quite considerable) necessary time.

STATED MEETING, DECEMBER 29TH, 1882.

Dr. HENRY HOWARD in the chair.

Cases in Practice.—Dr. Hingston exhibited a patient suffering from necrosis of the upper jaw, contracted from long exposure to the influence of phosphorous in the match works of Messrs. Eddy & Co., of Hull, Ont. The patient, a middle-aged man, had worked in the factory since six years of age, but the first evidence of infection was only six months ago, since which time the progress of the disease has been rapid. There is now complete necrosis of the alveolar processes of the upper jaw, with absence of the teeth and swelling and tenderness of the right side of the face from local periostitis. The lower jaw is healthy in every respect. Dr. Hingston spoke of the comparative rarity of these cases reported as occurring in the establishment of Messrs. Eddy & Co., and also of the fact of the lower jaw in this case being unimpaired, while the disease is generally spoken of as being peculiar to this bone.

Dr. Trenholme mentioned a case of necrosis of half of the lower jaw in a boy addicted to chewing matches.

Dr. Shepherd spoke of a case under the care of Dr. Macdonnell, the cause of which had been ascribed to the habit of burning matches in the mouth by a boy, shewing how peculiarly susceptible some were to the influence of phosphorous.

Dr. F. W. Campbell reported a case of pyæmia. The patient, an elderly person, during the past summer was poorly, and complained of flying pains in his feet, left the city, and returned about six weeks ago; pains continued. At this time the cuticle under the great toe and at the heel was slightly raised. On puncturing these points a watery fluid escaped, and the under surface of the big toe and a small portion of the little toe presented a small spot having a decidedly gangrenous appearance. He kept going about, and was actively employed till he had a severe rigor. Matter subsequently formed at the heel, which on evacuation was offensive and fetid. From this time there were repeated rigors. From the gangrenous spot a line of inflammation extended up over the instep and the inner side of the leg to the knee. A gangrenous looking spot at the instep disappeared on the application of poultices, but the condition at the toes remained unaltered, and shewed no tendency to spread. The arteries were hard and atheromatous. Cerebral symptoms soon set in, and the patient rapidly sank.

Dr. Hingston had met with many cases of gangrene, senile gangrene and other forms of the disease. In his opinion senile gangrene (although generally looked upon as fatal) is less dangerous than that of middle life; he had seen toes, and even half the foot, drop off, but in this form a small blush may indicate a fatal termination. He spoke of a case he had been consulted about last summer, in a man 54 years of age, commencing in gangrene of the small toe, which seemed trifling, only involving the 1st joint; in consequence of this an operation was postponed. In five or six days the whole toe was dead and half of the next toe, and matter was burrowing. No pulsation was felt in the artery as far up as the popliteal space. Amputation was then performed above the knee, and ½ an inch below the amputated part the artery was brittle like glass, and half way down the leg was blocked by a clot. The patient died from exhaustion in 36 hours.

Dr. Hingston said that gangrene of old age begins from without and extends inwards, whereas in that of middle life it shews itself in the skin last. The gravity of the case seems to be in inverse ratio to the age of the patient.

Dr. Howard spoke of the frequency of gangrene in the insane. In regard to the greater gravity in cases of gangrene occurring in middle life it might be explained by the greater power of absorption in these individuals.

The members were then invited into the reading-room to partake of refreshments provided by the officers of the society.

Progress of Medical Science.

TREATMENT OF AGGRAVATED HYSTERIA AND CERTAIN ALLIED FORMS OF NEUROSTHENIC DISEASE.

Dr. W. S. Playfair concludes an interesting and quite exhaustive article on this subject as follows:

The principal elements in the systematic treatment of these cases are—

1. The removal of the patient from unhealthy home influences, and placing her at absolute rest.

2. The production of muscular waste and the consequent possibility of assimilating food by what have been called "mechanical tonics;" viz.: prolonged movement and massage of the muscles by a trained shampooer, and muscular contractions produced by electricity.

3. Supplying the waste so produced by regular and excessive feeding, so that the whole system, and the nervous system in particular, shall be nourished in spite of the patient.

On each of these I shall offer one or two brief observations:

1. The removal of the patient from her home surroundings, and her complete isolation in lodgings with only a nurse in attendance, is a matter of paramount importance. This is a point on which I am most anxious to lay stress, since it is the great crux to the patient and her friends; and constant appeals are made to modify this, which I look upon as an absolute *sine qua non*. I attribute much of the success which I have been fortunate enough to obtain in my cases to a rigid adherence to this rule. In almost every instance of failure in the hands of others of which I have heard, some modification in this rule has been agreed to, in deference to the wishes of the friends; as, for example, treating the case in one room by herself in her own house, or in admitting the occasional visits of some relatives or friends. While, however, the patient is to be rigidly secluded, it is incumbent to secure the attendance of a judicious nurse, with sufficient intelligence aud education to form an agreeable companion, To shut up a refined and intellectual woman for six weeks with a coarse-minded stupid nurse, can only lead to failure. I have had more difficulty in obtaining suitable nurses, sufficiently firm to ensure the directions

being carried out, and yet not over-harsh and unsympathetic, than in any other part of the treatment. Whenever my case is not doing well, I instantly change the nurse—often with the happiest results. In addition to the isolation, the patient is put at once to bed, to secure absolute rest. In many cases she is already bed-ridden; in others there has been a weary protracted effort, and the complete repose is in itself a great gain and relief.

2. Under the second head comes systematic muscular movement, having for its object the production of tissue waste. This is administered by a trained rubber, and here again is a great practical difficulty. The so-called professional rubbers are in my experience worse than useless, and I have had to teach *de novo* a sufficient number of strong, muscular young women; and the aptitude for the work I find to be very far from common, since a large proportion of those I have tried have turned out quite unsuited for it. I cannot attempt any description of this process. I need only say that it consists in systematic and thorough kneading and movements of the whole muscular system for above three hours daily, the result of which at first is to produce great fatigue, and subsequently a pleasant sense of lassitude. Subsidiary to this is the use of the faradic current for about ten to twenty minutes, twice daily, by which all the muscles are thrown into strong contraction, and the cutaneous circulation is rendered excessively active. The two combined produce a large amount of muscular waste, which is supplied by excessive feeding; and in consequence of the increased assimilation and improved nutrition, we have the enormous gain in weight and size which one sees in these cases, it being quite a common thing for a patient to put on from one to two stones in weight in the course of five to six weeks. The feeding, at regular intervals, constitutes a large part of the nurse's work. At first from three to five ounces of milk are given every few hours; and for the first few days the patient is kept on an exclusive milk diet. By this means dyspeptic symptoms are relieved, and the patient is prepared for the assimilation of other food. This is added by degrees, *pari passu* with the production of muscular waste by massage, which is commenced on the third or fourth day. By about the tenth day the patient is shampooed for an hour and a half twice daily, and by this time is always able to take an amount of food that would appear almost preposterous, did not one find by experience how perfectly it is assimilated, and how rapidly flesh is put on. It is the usual thing for patients to take, when full diet is reached, in addition to two quarts of milk daily, three full meals, viz.: breakfast, consisting of a plate of porridge and cream, fish or bacon, toast and tea, coffee and cocoa; a luncheon, at 1 P. M., of fish, cutlets or joints, and a sweet; such as stewed fruit and cream, or a milky pudding; dinner at 7 P. M., consisting of soup, fish, joints, and sweets; and, in addition, a cup of raw meat soup at 7 A. M and 11 P. M. It is really very rare to find the slightest inconvenience result from this apparently enormous dietary. Should there then be an occasional attack of dyspepsia, it is at once relieved by keeping the patient for four and twenty hours on milk alone.

Such is a brief outline of the method to which I am here to direct your attention. As to the results, I have already published several remarkable illustrative cases, so that it is perhaps not necessary to do much more in this direction. I may say, on looking back at my cases, that the only ones with which I have any reason to be disappointed are those in which the primary selection has been bad: and in the few in which the results were not thoroughly satisfactory, I had doubts as to their suitability for the treatment, which I expressed before hand. These include one case of chronic ovarian disease, and one of bad anteflexion with fibroid enlargement of the uterus, in both of which the local disease prevented any really beneficial results. In the third I had to stop the treatment in a week, in consequence of cardiac mischief; two others were cases of positive mental disease; and in one case there was true epilepsy. I have no doubt that any positive coexistent organic disease of this kind should be considered a contraindication. In my other cases the results have been all that could be wished, and in many of them the patients have been restored to perfect health after having been helpless bedridden invalids for years; in one case twenty-three without ever putting a foot to the ground, in others sixteen, nine, six, and so on. In two instances my patients were in such a state, that it was found absolutely impossible to move them except when anesthetized; and they were brought to London by the medical men long distances under chloroform, in each case leaving in six weeks perfectly cured.

DIAGNOSIS BY ABDOMINAL SIGNS.

Dr. J. Matthews Ducan writes as follows in the *Med. Times and Gaz.*:

Begin by examining the abdomen, exposing it to observe its pigmentation, striæ or cracks, wrinkles, baggedness, scars, eruptions. Then you feel it carefully all over, and, if you find anything abnormal, you note the presence or absence of the numerous qualities or conditions which I shall presently describe in categories. Keep in mind the arrangement of the cavity into regions—epigastric, right and left hypochondriac, three lying above a latitudinal line joining the lowest fixed rib of either side; umbilical, and right and left lumbar, lying below the preceding three, and bounded below by a horizontal or latitudinal line which joins the iliac crests; hypogastric, and right and left iliac, beneath the three preceding. In mapping, besides the horizontal or transverse lines, you use two which are vertical or longitudinal, and run from the middle of Poupart's ligament.

Erroneous notions of the antero-posterior dimensions of this cavity, as a woman lies on her back for examination, are prevalent, being carried into the mind by the familiar anatomical drawings in books, which represent the anterior abdominal wall as far removed from the lumbar spine. Now, in a healthy woman this wall almost touches the spine; the aotic pulsations being, at the navel, frequently visible, and easily felt by the finger slightly depressing the wall.

Examining the abdomen of a healthy woman not overloaded with fat, you recognize localities by the floating ribs, the lower margins of the fixed ribs, the xiphoid cartilage, the iliac crests and spines, the pubic bones, the lumbar vertebræ, and the often accessible sacral promontory, the navel lying on the next lowest lumbar vertebra, and the aortic bifurcation about an inch lower down and nearly an inch above the sacral promontory. You may make out the position and dimensions of the spleen by percussion; and the lower margin of the liver may be felt or made out by percussion. Occasionally, in a thin, relaxed, healthy woman, with yielding abdominal parietes, you may, with some definiteness, feel the kidneys; and occasionally the fundus uteri can be made out. Some authors of eminence say the ovaries can also be felt, and do not add the qualification of "rarely;" but, for my part, I say that I have never distinctly felt them in the healthy or in the pregnant woman, and I regard the directions given for finding them in the unimpregnated woman as misleading. I shall afterwards point out to you how they may be felt and actually examined.

If, in any part of the abdomen, you find enlargement, or hardness, or tension, you specially investigate its conditions; and the conditions which you have to consider are numerous, for the possible diseases are numerous and various; and for the diagnosis it is necessary to make out the physical conditions and characters not only of the whole swelling, but also of its parts.

Sensitiveness, tenderness, pain, are conditions made out on this examination, and are mentioned here, though they are not physical, and do not come under a strict definition of signs; and one of them, pain, is a sympton—the great symptom, indeed.

The region or regions occupied, the size, including the prominence, and the shape, of the swelling, are ascertained.

It may be dull on percussion, resonant, or tympanitic, and these conditions may be present or absent in different parts and at different times.

It may be more or less elastic, or have the feeling of fluid—that is of having fluid contents; or it may present fluctuation, a sign quite distinct from that of a feeling of fluid.

It may be mobile or floating, or it may be merely displaceable, or it may be fixed.

It may present no definite characters, and is then called a fullness; or it may be hard in greater or less degree; or it may be a tumor—that is, a defined mass having three dimensions.

It may be growing at various rates, or it may be stationary, or decreasing.

There may be felt in it, or over it, friction, or pulsation, or movement.

If it has irregularity of surface, and no adhesions anteriorly of a tumor, then movement of it may be seen in inspiration and expiration, or on displacement by the hand. The bowels may also be seen to move or travel in like manner.

The ear may find it dumb, or may find a souffle, or a pulse, or friction, or gurgling, or movement of a fœtal limb.

All these points have in most cases, and in every case of difficulty, to be investigated and considered.

STRYCHNINE AND NUX VOMICA IN INFANTILE THERAPEUTICS.

We take the following rules for the use of strychnine in the disorders of the digestive organs of children from the lectures delivered by Simon in the hospital *Enfans Malades*, in Paris.

There is a form of dyspepsia that you will find in young girls, with faces full of expression, at the approach of puberty, when from eight to fourteen years of age. They come complaining of gastralgia, of different forms of dyspepsia; they are generally constipated. Aftere ating, the epigastric region becomes swollen, tense and painful; their intelligence is above that of children of their age, but they are capricious, irritable, whimsical; already untruthful, they use far-fetched expressions, affected, and very different from what ought to come directly from the minds of children. These are the links of the chain that unites the neuropathic affections of children to confirmed hysteria. This is one of the favorite formulas of Mr. Simon, for that condition:

℞. Tr. of cascarilla, Tr. of cannella } aa 5 grammes.
Tr. of gentian, Tr. of colombo, Tr. of rhubarb, Tr. of nux vomica } 1 to 2 grammes.

This constitutes a very good aperient, of which ten drops should be given in some wine before meals. If constipation predominates, increase the proportion of rhubarb and tincture of belladonna:

℞. Tr. of rhubarb, 10 grammes.
Tr. of belladonna, 3 grammes.
Nux vomica, 1 gramme.

To be given in the same dose and manner as the preceding.

For those who will take powders, he prefers to give this prescription in that form:

℞. Powder of crab's eyes, 0.20 centig.
Magnesia calcined, 0.15.
Rhubarb, 0.10.
Nux vomica, 0.05.
Pepsine, 0.05.

If there be intestinal indigestion also, and meteorism becomes very pronounced, he orders the belly to be rubbed with the following liniment:

Tr. of nux vomica,	3 gram.
Tr. of belladonna,	5 "
Camphorated oil of chamomile,	15 "

or with a pomade of the neutral sulphate of strychnia, 1 part to 60 of ointment. You will be astonished to see how notably the meteorism will be diminished. The same ointment can be used for prolapsus of the rectum, and also for relaxation of the anal sphincter, so common in old people and children.

In paralysis of every kind nux vomica is much used, either to hasten the return of motion from peripheric or toxic paralysis, or to prevent the degeneration that takes place in muscles condemned to repose, or when the lesion is in their tropic centres.

In diphtheritic paralysis he gives two to five drops of tincture of nux vomica before each meal, insisting at the same time on tonic medication: cod-liver oil, or cinchona wine.

In the grave and extended cases of diphtheritic paralysis it is well to insist strongly on the use of strychnia; from five to ten drops of the tincture of nux vomica must be given at each dose, or from two to eight drops of the following solution, of which the effects must be carefully watched:

℞. Sulphate of strychnia, 1 milligr.
Eau, 1 gr.

Infantile paralysis is divided into two stages, the first or febrile, which lasts from six to eight days; at the end of that time, when the child is raised from his bed, the paralysis is first perceived. This is the beginning of the second stage, and it is only during this one that he uses nux vomica in the form of tincture. From five to ten drops during each meal will have the effect of awaking the muscular functions, and of combating the atony of the digestive organs.

In other affections of the nervous system, such as the weakness of the convalescents, the paresis that is brought on by long-continued surgical dressings, and that which follows rheumatism, he employs nux vomica, alternating its use with that of arsenic. He has obtained good results from the arseniate of strychnia.

For chorea he does not use strychnia, because it is a rheumatic affection, and says that it should be treated as such; it cannot be cured, but may be rendered less severe. He knows nothing that will shorten it—its duration being about three months.

In incontinence of urine, when belladonna and the cold shower-bath have failed in nocturnal incontinence, you may have some hope in strychnia. The diversity of results obtained elsewhere is easily explained by the immediate and predisposing causes of that infirmity. Belladonna is nevertheless preferable to nux vomica, which, on the contrary, excels when the incontinence is diurnal as well as nocturnal. In those cases of epilepsy that were not ameliorated by the bromides, either simple or compound, Mr. Simon found it well to order strychnia, alternating, about every five days, with atropia. He had two cases at that time that were notably benefited by this treatment, so entirely opposed to the bromides. It is an enigma, he confessed, that was inexplicable. The appearances of cerebral congestion were the same as those in other patients who received the greatest benefit from the bromides.

In concluding he said that strychnia was decidedly contraindicated in marked irritability, in cerebral irritation, in all acute disorders of the nervous centres; but, administered as he has carefully pointed out, it would always give the best results as a bitter, as a tonic, as an excitant of the sensibility, and of the reflex actions.—*The Progrès Medical.*

PLEURISY IN CHILDREN.

The following is a portion of a clinical lecture by Dr. Wm. T. Plant, published in *Obstetric Gazette:*

In the young as in the mature, pleuritus is almost always unilateral, and that is a blessing, for thereby we are furnished with a standard of comparison.

It is practically important that you should know that it occurs under different conditions. It may be *primary*—standing apart from any other disease; or it may be *secondary*—that is, attendant on and sequent to some other malady as pneumonitis, scarlet fever, nephritis, rheumatism or pulmonary consumption.

As a primary affection, its usual cause is taking cold. It may happen to the youngest infant, though it is mostly met with in children who are older and more liable to exposure. In grown people the initial symptom is a chill. Not so in infancy and not generally so in childhood. Sometimes vomiting is the first thing noticed; sometimes a convulsion or a series of them. But usually the first symptom of prominence is pain—a stitchy, stinging pain. Though infants cannot tell you this, the fact of pain is made evident by fits of crying and screaming and a disinclination to be moved from a chosen position. Older children will indicate the seat of pain. In most cases, perhaps, it is in one side near the nipple; but quite often it is not in the thorax at all, but in the upper part of the abdomen, and the child's constant wail may be that his "belly hurts." I would have you make a mental note of this, for not a few children have been treated for colic when the real trouble was pleuritic. I suppose the reason of this is to be found in the fact that the lower intercostal nerves are distributed to the integument of the abdomen. The pain of pleuritus in early life varies

greatly as to intensity. Sometimes the little one appears to be in the extremest distress, and there may be such tenderness of the affected part that the least pressure causes flinching. In other cases the pain is moderate and not lasting. Though I cannot give you the reason, I may mention the fact that the pain may remain limited to one small spot, though all the pleura of that side may have become inflamed.

I may as well tell you here that you will sometimes fall in with cases of pleurisy that are latent as to pain and other prominent symptoms. A child that had not been known to be seriously ill is brought to you for an opinion as to the cause of its failing health. You examine it and find one side of the thorax full of fluid. Insidious pleurisy is rather frequent in early life, especially in connection with scarlet fever and some other diseases.

The next symptom that will in most cases engage your notice is the cough. A child in the first days of pleuritis handles its cough with the greatest caution. It is short, dry, and frequent, and the pain that it causes and the efforts to suppress it are often depicted in the features. But the cough is as variable as the pain. In some cases it is well nigh constant; in a few so slight as scarcely to attract notice. But please to notice that the cough *follows* the pain—the latter generally having a lead of half a day or more.

Another point is the fever. Pleuritis, like other affections ending in *itis,* is attended by a rise of temperature. I think it is seldom quite as high as in acute pneumonia. The difference in surface heat between these two divisions may be strikingly evident to the hand. In pneumonitis the integument is often "burning hot;" in pleurisy it feels but little warmer than nature. In pneumonitis also the face is flushed, often crimson; in pleuritis, if there is a little flushing at first, it soon subsides and leaves the countenance pale and often rather sallow. Notice also the decline of temperature in the two diseases. In acute pneumonia it is sudden; at the end of a week or thereabouts the crisis occurs and the temperature falls quickly—in one day—to the normal or even below it. But in pleuritis the decline is always gradual. Often two or three or more weeks pass before it drops to the standard of health. The pulse is, of course, quickened in its pace, and there are the usual attendants of the febrile state.

Occasionally, in the first days, when the fever is at its highest, there is severe headache and active delirium; and if there is also vomiting and constipation you may lean towards a diagnosis of cerebral inflammation. But consider and weigh all the symptoms and carefully examine the chest, and you will seldom go wrong.

Another feature of this disease that claims your attention is the breathing. It is hurried, but less so, as a rule, than in pneumonia. If you observe it carefully you will be struck with its superficial character. The child prefers to breathe frequently rather than deeply, for it has learned that a full breath excites the cough and causes pain. There is seldom either much dyspnea or lividity. If the child needs more air, it breathes oftener rather than deeper. Sometimes there is a little expansion of the nares and an expiratory moan, but these features are seldom as prominent as in pneumonitis.

Altogether the child will probably seem to be less ill than are children with acute inflammation of the substance of the lung, nor is there at the end of a few days that sharp turn for the better that characterizes the latter disease. The natural result of an inflammation of the pleura is, as you well know, an increase in its functional activity; hence an exudation of fibrinous lymph or of serum, or both. Layers of fibrin are deposited on the pleural surfaces while detached shreds and floculi of it float in the fluid that is accumulating within the cavity. In most instances this fluid is a clear serum; but here is a point that I would emphasize: In children this fluid has a remarkable tendency to become purulent; sometimes, indeed, it has this character from the very first. This is empyema.

The amount of effusion is variable. There may be but two or three ounces—not enough to hamper the lung in its movements; or there may be sufficient to fill the cavity full and over-full, so that the lung, retiring before it, is crowded into a corner at the upper and inner part of the chest—an airless, bloodless, leathery lump.

I hardly need to tell you that, as a result of excessive effusion, the diaphragm may be pressed downward, the heart crowded to one side, the intercostal spaces rounded outwards, and the side considerably increased in its measurement. The increase in size, however, may be difficult to estimate, because the other side may be enlarged as much from the increased volume of the sound lung that now has double work to do.

I have gone somewhat minutely into the general symptoms because the physical signs on which in the pleurisies of adults we can plant ourselves with so much assurance are often, in children, unreliable and misleading. Especially is this so at first. Auscultation is unsatisfactory, because the child breathes as superficially as possible, and the friction sound is seldom caught in infants and young children.

After some days, when considerable effusion has occurred, a diagnosis is not difficult. The flat, toneless thud, and the sense of great resistance on percussion, are of themselves almost conclusive of a fluid accumulation. Above the level of the liquid the sound will be clear and tympanitic. In some instances the diagnosis may be happily confirmed by observing that the upper line of dullness varies with changes in the posture of the child. But often the fluid is confined by fibrinous partitions, or the pleural sac is full, and then this test is not available.

In the adult, when the effusion is large, all respiratory sounds may be absent, and the results of auscultation are only negative; but in children there is seldom so much fluid between the lung

and the chest-wall as to do away with bronchial breathing, and quite often the vesicular murmur may still be faintly heard. This will not be so, of course, when the accumulation is so great and the pressure so long continued as to wholly close the lung to the entrance of air. But in any event the contrast between the diminished air-sounds of the crippled side and the exaggerated respiration and hyper-resonance of the sound side will be so pronounced that there should be no error of diagnosis. When there is much effusion it may be both seen and felt that the usual mobility of that side is lessened.

Some writers speak of a change of shape as a sign of large effusion, consisting in lateral flattening and anterior bulging.

You will not forget that in the young, pleurisy and pneumonia are often concurrent—pleuro-pneumonia. In that case you will recognize the prominent symptoms of both diseases, and you will give a guarded prognosis, for the condition is one of extreme peril.

In early, as in mature life, pleurisy may terminate in different ways. In many—in most cases, the fever ceases within a few days; the exudation is speedily absorbed; the lung regains its former volume, and within two or three or four weeks the child may be as well as ever. In some cases, and especially if the pleurisy is secondary to other disorders, the child may die at length from diseases and exhaustion. In many instances, the fluid, if not purulent at first, soon becomes so. I think I have already stated that suppurative pleurisies are much more frequent in the young than in older people. Secondary pleuritis is very often of this character. Empyema is always a serious disease. It is true that when the quantity of pus is small it may be disposed of through fatty degeneration and absorption, but not so, I think, if the cavity is full or nearly full of pus. It is retained; and before long there are symptons of pyemic infection, such as high fever, exhausting night sweats and rapid wasting. After some weeks, or months, if the child lives so long, unless your art has provided an outlet for the pus, nature attempts its evacuation either through a spontaneous opening in the chest wall, or internally through the air tubes or esophagus, or possibly downwards through the diaphragm. In children, evacuation through the outer wall seems to be nature's favorite method.

But even when the drain has been established the child does not always recover. The production of pus may keep pace with its discharge until the patient sinks from exhaustion or falls into a hasty consumption. If it lives and the discharge at length ceases there is apt to be retraction of the side and spinal curvature, resulting from atmospheric pressure. In children, however, much oftener than in adults, the crippled lung may by slow degrees become re-inflated and reach at length its former volume, and in this way a very considerable deformity may in time be overcome.

Treatment. "Prompt and very efficient bloodletting is indispensable in the treatment of this form of pectoral inflammation. Blood should be freely drawn with the lancet until a decided impression is made on the pulse. The early application of leeches to the chest is also a highly important measure. As soon as the momentum of the circulation has been moderated a blister ought to be laid over the breast. The bowels must in the first place be freely evacuated by an efficient dose of calomel and rhubarb and kept in a loose state throughout the course of the disease by small doses of calomel and ipecac, or suitable portions of epsom salts."

I have quoted these lines from a great authority in his day, partly that you may see how tenderly the little ones of thirty or forty years ago were treated, but chiefly to caution you against such counsel. Do nothing of the kind. Do just the other way. Avoid reducing measures, and seek to preserve the child's strength.

The truth is that most cases of primary pleurisy tend to speedy recovery without medical treatment. Yet we are not on that account to withhold our ministrations.

If the pain is severe, considerable relief may usually be obtained by hot poultices—linseed as good as any—so covered as to retain their heat. More rapid and complete relief may be had by the hypodermic use of morphine—one-thirtieth of a grain for a child of one year, When the pain is referred to the abdomen a broad bandage so applied as to restrain abdominal and diaphragmatic movement may give some relief.

To quiet the cough at night, and secure rest, Dover's or Tully's powder may be given in doses of from one to three grains according to the age. At first, while the fever lasts, the diet should be light and simple; later it should be nutritive but plain. Constipation is to be obviated; beyond that I do not believe cathartics are of service.

Some cases require more decided treatment. In weakly children, especially if the pleurisy is secondary, absorption may be for a long time at a standstill. Your first duty in such cases is to determine whether the fluid is serious or purulent. This is easily done by passing the hypodermic needle through an intercostal space in the lower half of the chest. The back is preferable, because the child is less terrified when not a witness of the procedure. If clear serum is withdrawn you are justified in resorting to medical means to hasten its absorption. Among these means diuretics have always been in favor. If unable to devise a better, you may use a formula something like this: ℞ Potassii iodidi, ʒ ii; Potassæ nitratis, ʒ i; Infusi digitalis, ʒ ii; Syrupi simplicis, ℥ iss.; Elix., simplicis, ʒ i; Misce Aquæ ad. ℥ iv.

Signa. Teaspoonful once in four hours for a child three or four years old.

Tonics do well for these cases, and about the best of them is the old muriated tincture of iron.

From five to ten drops with syrup and water will not be too much for a child from one to three years old.

We likewise have local treatment for promoting absorption. Inunctions with blue ointment have, I am glad to say, fallen into merited desuetude. The compound iodine ointment is a good remedy. It may be applied over the effusion with suitable friction from one to three times daily. Eustace Smith prefers the liniment of iodine to any other form. He paints a spot the size of the palm of the hand twice daily until the skin becomes irritated and then works a new field. I believe that small blisters removed from place to place—flying blisters as they are called—are about as efficient agents as we have for exciting the absorbents. Only blisters, even small ones, are irritating and tantalizing to the young, and I seldom use them if I can serve my ends by other means. Seek in all ways to put your patient in good general condition. "Proper nutrition and good air," says Vogel, "are the main essentials to rapid absorption."

Some late authors recommend a "dry diet" to starve out the effusion. I doubt whether much is to be gained in this way, for the system will not long remain in good condition if deprived of a proper supply of fluid.

By perseverance in the use of the above means, with now and then, if the little one is not weak, a sharp cathartic or a sweat, most serious pleuritic effusions will, after a time, become wholly absorbed.

But if the quantity is excessive, if the mediastinum is crowded to one side and dyspnea occur, the fluid should be promptly let out. This may be done by a small trocar and canula, or better, perhaps, by the aspirator. It has often been noticed that the removal of a part of the fluid serves as a stimulus to absorption, so that the residue is taken care of without further instrumental aid.

Doubtless, mine and your esteemed friend, Prof. Alfred Mercer, of the chair of Surgery, will give you specific instructions as to the details of chest-tapping, or, to speak less burglariously, *paracentesis thoracis*.

If, instead of abating at the usual time, the fever continues or increases; if there are profuse night sweats and a growing debility, and if percussion shows that the fluid is not lessening, it probably is, or is becoming, purulent. If this suspicion is confirmed by an explorative puncture, the sooner you tap the better. It is true that nature may establish a drain and make a tardy and (too often) an incomplete cure, for the proportion of empyemas in children successfully treated by aspiration is much greater than of adults. If the pus reaccumulates after its withdrawal the operation may be again and again repeated.

It seems, sometimes, as if the whole pleura had become converted into a pus-forming membrane, so rapidly is it produced. For these cases I think the better way is to make a counter opening; to wash out the cavity daily with warm water *slightly* carbolized or iodinized, and to insert a drainage tube. In all cases of empyema, bear in mind the danger of phthisis. Feed your little patient liberally with milk punch, eggs, meat broth, and the best food he can digest, and resort early to such agents as cod-liver oil and quinia.

COLIC IN CHILDREN.

The *Medical Times and Gazette* says: In a clinical lecture delivered by Hofrath Prof. Widerhofer, and reported in the *Allg. Wein. Med. Zeitung*, No. 22, we find the following observations:—

By the term colic we understand an intestina neurosis originating in irritation of a chemical or mechanical kind, of the sensory nerves of the mucous membrane of the intestinal canal. The causes of this irritation arise either in a changed condition of the mucous membrane or in the nature of the contents of the canal. There may also occur pure y nervous colic, wherein neither irritating ingesta nor a pathological state of the canal is present, excitement of the central organs being propagated to the nerves of the canal. In infants who are at the breast it is indigestible milk, and especially when this is too rich in fatty matters, that causes the colic; and when children during the first six months are fed with amylaceous food, before a sufficiency of saliva is secreted, colic is also produced. This occurs, too, when indigestible matter are swallowed, such as sand, small pebbles, etc.; and we have good opportunities of observing the operation of this cause in idiots, who often swallow such objects in great numbers. And here we have to meet the question, whether during the period of lactation the mental emotions of the nurse may not induce colic in the infant. It is beyond doubt that frequent mental emotions may induce colic with convulsions, which may be explained by the changes that are induced in the secretion of the milk. In the group of colics induced by irritation caused by the contents of the canal, must be included that caused by constipation, by worms, and by the presence of foreign bodies. Of the morbid conditions of the mucous membrane which give rise to colic, enteritis folliculosa may be especially mentioned, and then scrofulous and catarrhal ulcers, the worst forms being observed in intussusception. Pure nervous colic appears in diseases of the spinal cord, and it may appear in hysterical form, which is not so very rare, and also as intermittent colic, with as regular rhythm as in intermittent fever. We may also include metallic colic, which certainly occurs far more frequently in children than it is diagnosed, as might be expected from the frequency with which toys are made of or contain lead. As regards diagnosis, the purely windy colic produced by the collection of gases which distend the canal and irritate the sensory nerves, comes on with attacks of pain and

with distension of the abdomen, ending with the expulsion of flatus. These attacks are paroxysmal, and are frequently accompanied by clonic convulsions, which may last for some minutes, and even for an hour or more. After the cessation of the paroxysm the child is either itself again, or may remain dull and feeble. In the intervals of the attacks there are no essential cerebral symptoms perceptible. The prognosis depends upon the nature of the cause, but it has been questioned whether a colic of itself alone may not prove fatal. Through the long duration of the accompanying convulsions, through the shock and the exhaustion of the nervous system, death may follow, and at the post-mortem no anatomical cause of the fatal termination can be shown. Hysterical attacks of colic especially concern very excitable children, usually nervous girls, and are characterized by violent pains, a drawing in abdomen, slight convulsions, and obstinate constipation. In the treatment of colic we must first endeavor to remove the cause. In suckling infants, colic is especially apt to occur when the nurse's milk exhibits a large proportion of fat, and in such a case the nurse should be changed. In flatulent colic, oleum chamomillæ or fœniculi may be given, with a drop of tinture of opium, as an oleo-saccharate. In metallic and in hysterical colic, belladonna is the best means; and intermittent colic should be treated by quinine.

SICK HEADACHE.

Surgeon Major Roehring of Amberg, reports, in No. 32 of the *Allg. Med. Centr. Zeit.*, April 22, 1882, a case of headache of long standing, which he cured by salicylate of sodium, which confirms the observation of Dr. Oehlschlager, of Danzig, who first contended that we possessed in salicylic acid one of the most reliable remedies for neuralgia. This cannot astonish us if we remember that the action of salicylic acid is, in more than one respect, and especially in its influence on the nervous centres, analogous to quinine.

While out with the troops on manœuvre, Dr. Roehring was called to visit the sixteen-year-old son of a poor peasant family, in a neighboring village. The boy, who gave all evidences of living under bad hygienic surroundings, but who had shown himself very diligent at school, had been suffering, from his sixth year, several days every week, from the most intense headache, which had not been relieved by any of the many remedies tried for the purpose. A careful examination did not reveal any organic lesion or any cause for the pain, which seemed to be neuralgic in character, a purely nervous headache. Roehring had just been reading the observations of Oehlschlager, and knowing, from the names of the physicians who had been already attending the poor boy, that all the common remedies for neuralgia had been given a fair trial, thought this a good opportunity to test the virtue of salicylate of sodium. He gave the boy, who, in consequence of the severity of the pain, was not able to leave his bed, ten grains of the remedy every three hours, and was surprised to see the patient the next day in his tent and with smiling face. The boy admitted that he for years had not been feeling so well as he did then. The remedy was continued, but in less frequent doses, for a few days longer; the headache did not return. Several months later Dr. Roehring wrote to the school teacher of the boy, and was informed that the latter had, during all this time, been totally free of his former pain, that he was much brighter than formerly, and evidently enjoying the best of health.

It may be worth while to give the remedy a more extensive trial, and the more so as we are only too often at a loss what to do in stubborn cases of so-called nervous headache.

THE SUBCUTANEOUS INJECTION OF ETHER.

It should be more generally known that ether injected subcutaneously has a powerful stimulant effect, and is remarkably efficacious in case of extreme depression of the powers of life. It has long been used to a limited extent in such cases, but increasing experience has enlarged the domain of its application. In adynamic pneumonia, in fevers when failure of the vital powers is threatened, in the puerperal state, in cases of thrombosis of important vessels, the injection of ether has been lately used with singular benefit. Besides, as a stimulant in conditions of depression it has important applications as a hypnotic and local anodyne. In cerebral excitement and wakefulness, accompanied by depression of the arterial circulation, it is most useful. In the more chronic cases of superficial neuralgia, as sciatica, lumbago, intercostal pain, zoster, etc., ether injected in the neighborhood of the affected nerves often gives surprising relief.

There are contra-indications to its use. It is not proper in the cases of cardiac depression due to chloroform or ether narcosis, and yet it has, in the confusion incident to such an event, been freely injected on the cessation of the cardiac or respiratory movements. Under similar circumstances, alcohol has also been freely injected subcutaneously, but this practice is equally improper—and both for the obvious reasons that these are synergistic agents. Ether, subcutaneously, is also not a suitable remedy when there is arterial excitement with power.

The technical details are simple. Ether must be injected with a glass or metallic syringe. Rubber and celluloid are damaged by it. As ether dissolves the oil with which the piston is lubricated, the syringe should always be put in order after ether has been injected. It is a useful precaution,

also, to see no particles of dirt or of leather are taken up with the fat. Vaseline appears to be the safest lubricant under these circumstances. From ten to sixty minims is the dose—fifteen minims being the quantity most frequently injected. Some smarting attends the operation, but if the operator is careful in withdrawing the needle to press on the orifice tightly, to prevent the ether escaping, much smarting will be thus obviated. A puffy swelling is caused by the vaporization of the ether, and this presently subsides, and only rarely is an indurated knot formed. An anæsthetic and analgesic area of limited extent surrounds the puncture.

The ether used should be of good quality—as good, indeed, as that employed for inhalation. The number of times injected will depend on the character of the case, but there appears to be no reason why it may not be injected frequently. Three or four times a day has been the rate in cases of adynamic pneumonia. When sudden, extreme depression of the heart is to be overcome, ten or twenty minims can be injected every five minutes. until some result is reached.

The systemic effect is that of a stimulant; the action of the heart is increased, the surface grows warm, and the nerve centres and the organs of the body in general functionate more quickly and powerfully. The curative results of the subcutaneous use of ether are not only different, but in kind, from the stomachal administration of the same agent. This fact must be recognized to obtain a correct notion of the utility of this practice. —*Medical News.*

STRUMOUS OPHTHALMIA.

The physician is often called upon to treat cases of strumous ophthalmia, children of a strumous habit, who suffer with sore eyes, and perhaps other evidences of scrofula, but in which the unpleasant condition of the eyes is the most prominent symptom. The lids are red and swollen, with numerous and frequently recurring minute pustular collections about the lashes, with some conjunctivitis and photophobia, etc., not only giving the eyes a very unpleasant appearance, but also preventing the patient from using them with any degree of comfort.

In these cases, in addition to the local treatment as sketched above, the internal use of sulphide of calcium is almost a specific. The good effects resulting from the use of sulphide of calcium in scrofulous sores, suppurating glands in the neck and similar affections occurring in connection with this strumous diathesis, have been known for some time, this use of the remedy having been brought to the attention of the profession by Dr. Sydney Ringer; but it is of more recent date that it has been recommended in cases of blepharitis and strumous ophthalmia.

I have employed it in a number of cases and with very satisfactory results; and, although my experience with it has not been sufficiently extended to be able to express a decided opinion, yet I feel that this remedy is destined to be a valuable one in the treatment of this class of cases. The testimony of others as to its efficacy is being gradually collected, and sulphide of calcium is assuming a high place in the therapeutics of strumous ophthalmia, blepharitis, phlyctenular keratitis, etc.

Of course there are some cases it will fail to cure, but it often happens that the exception proves the rule. There are some cases of ague that quinine fails to cure, and yet no one doubts the value of quinine in the treatment of ague. But even though there are some cases of strumous ophthalmia that sulphide of calcium will not cure, yet I think it cannot fail to be at least of partial benefit in every case, so that it should always be given a fair trial.—*Dr. C. H. Brown in The Medical and Surgical Reporter.*

INHALATION OF MEDICATED VAPORS IN DISEASES OF THE RESPIRATORY ORGANS.

Guillemin (*Archives Méd. Belges—Lond Record*) summarizes his views as follows:

1. The affections of the mucous membrane of the respiratory passages may in certain cases be advantageously treated by inhalations of medicated vapors.

2. In the first stage of acute inflammation of this mucous membrane, pain, cough, and painful sensations, which are the consequence of irritation and dryness, are rapidly calmed by inhalations of warm, moist, and aromatic vapors.

3. The calming action is still more decided if to the liquid, which serves for inhalation, there be added a small quantity of certain volatile calmative substances, such as ether, distilled cherry-laurel water, or conium.

4. Frequently renewed inhalations of essence of turpentine, when they are administered at the commencement of the first period of inflammation, may arrest its progress.

5. The vapor of iodine exercises an irritant action on the mucous membrane of the air-passages. It induces efforts of coughing, and augments the secretion of the mucus of the air-passages. This irritating action may be utilized: (*a.*) To diminish the swelling of the mucous membrane by causing the inflammation to pass from the first to the second stage; this indication is present especially in cases where the inflammation occupies the small bronchi; the swelling of the mucous membrane is sufficient to give rise to fear of respiratory insufficiency. (*b.*) To diminish the viscosity of

the products of morbid secretion by their admixture with the mucus, of which the vapors increase the formation. (*c.*) To induce efforts to cough, and to disembarrass the air-passages from the products which are there accumulated.

6. It is not only by its irritating properties that the vapor of iodine modifies the mucous membrane of the air-passages. Iodine in reality possesses the property of stopping purulent secretion, and, on the other hand, it arrests and prevents putrescence. Thus, when the mucous membrane of the air-passages yields a purulent secretion, resulting either from an acute inflammation in the third stage, or from a chronic inflammation, the inhalations of iodine will determine by degrees the quantity of pus, and finish in certain cases by entirely changing the nature of the secretion, which becomes completely mucous.

7. Although the essence of turpentine, in the fluid condition, is a sufficiently powerful irritant for the tissues with which it is placed in contact, inhalation of this essence is easily supported by the mucous membrane of the air-passages. It only brings on very moderate irritation, and very rarely provokes fits of coughing.

8. When the mucous membrane is affected, and yields a product of secretion, these vapors have the effect of diminishing the quantity and augmenting the consistence of this.

9. If the product of secretion be purulent, the inhalation of essence of turpentine, continued during a sufficiently long time, progressively diminishing the quantity of pus, may, in certain cases, competely stop the secretion. The inhalations are indicated in all affections of the larynx, of the trachea, and of the bronchi, when accompanied by a very copious muco-purulent secretion without viscosities. On the other hand, the use of them must be avoided whenever expectoration is difficult, in consequence of the too great viscosity of the products of secretion.

10. In cases when these products are at the same time very copious and very viscous, it is possible, by alternate inhalations of vapors of iodine and vapors of turpentine, to rapidly diminish the quantity of secretion without increasing its viscosity. The inhalation of iodine should always be used in the first instance.

11. Inhalation of essence of turpentine is indicated in hæmoptysis, and is very successful in cases of hæmoptysis of average intensity.—*Detroit Lancet.*

IODOFORM IN DIABETES MELLITUS.

By Prof. Jacob Moleschott (*Wiener Med. Wochenschr.*, 17–19, 1882). Prof. Moleschott reports five cases of diabetes mellitus which were treated with iodoform, and the result in these cases lead him to the following conclusions: Iodoform is a remedy of much promise in this disease. A few days after the commencement of the iodoform treatment, there is a marked reduction in the amount of sugar discharged, and in a few weeks it disappears entirely from the urine. If, however, the saccharine matter again appears, after the remedy has been suspended for a few days, it is an evidence that the disease is not cured, and the iodoform should be repeated in larger doses. Furthermore, it was noticed that there was a marked improvement even in those cases where an unsuitable diet was persisted in, or when the patient had to contend with harassing care and excessive work. Finally, iodoform produced curative results, in some cases, after a faithful trial of salicylate of soda had been made without effect. This agent (salicylate of soda) had been used in doses of three or four grammes daily; and there was, it is true, a decided diminution in the amount of water and of sugar under its use, but the effect of iodoform was far more prompt and more lasting.

The dose of iodoform to commence with is from 10 to 20 centigrammes, but it may be increased to from 30 to 40 centigrammes a day. To conceal the disagreeable taste and odor, he advises that it be given in the form of pill, and combined with tonka-bean.

RECENT RESEARCHES ON TUBERCLE, AND THEIR BEARINGS ON TREATMENT.

By Robert Saundby, M.D. Edin., M.R.C.P. Lon.

The history of tubercle, ever since its first description by Lænnec, has been a history of controversies. The rival schools of Paris and Montpelier in Lænnec's time fiercely debated the question whether its origin were inflammatory, as Broussais maintained, or a "deposit," as Lænnec held. In our time there has always been a very strong school following the teaching of Alison, Addison, and Niemeyer which regards tubercle, at least so far as it constitutes the common lesion in pulmonary phthisis, as the consequence of inflammation, often strumous in character.

All attempts to establish a histological criterion to determine the specific nature of a supposed tubercular lesion, from Lebert's tubercle corpuscle to Schüppel's giant cell system, must be regarded as having failed.

Rindfleisch's view that tubercle is an infective process, originating in caseous material, was supported by the experiments of Villemin, Klebs, Cohnheim, and others, who found that caseous matter introduced under the skin of rabbits and guinea-pigs produced tuberculosis; but this theory fails to explain those cases of spontaneous tuberculosis in man in which no cheesy focus can be found; and, moreover, the experiments just named were somewhat invalidated by the contradictory

results obtained by other experimenters, and also by the fact that tuberculosis followed the introductionof many other substances besides caseous matter, even blotting-paper and gutta percha ! (Cohnheim, Frankel). But more recent experiments with ubercular matter itself have been more decisive. Tappeiner succeeded in producing tuberculosis in dogs—animals not liable to spontaneous tuberculosis—by making them inhale phthisical sputa, distributed by a spray producer ; while similar experiments with non-tubercular sputa and pus gave no result. These experiments were very numerous, and had the advantage of being performed in Virchow's laboratory, the autopsies of the dogs and the descriptions of the lesions being made by his assistance. In addition, more precision has been introduced into the inoculation experiments by the plan of introducing the morbid material into the anterior chamber of the eye instead of under the skin ; by this means tuberculosis of the iris is produced, and owing to its situation the evolution of the lesion can be watched from day to day. Such experiments have been made by Cohnheim, Baumgarten, and Solomonson, and their results strengthen the view that tubercle is a specific disease, capable of propagating itself by infection.

The infective nature of tuberculosis was insisted upon very strongly by Cohnheim in his pamphlet, published two years ago, which attracted very general attention. He insisted that this constituted the sole criterion of tubercle ; that is to say, given a certain diseased animal tissue, its tubercular nature could be proved only by observing the consequences of introducing a portion of it into the body of another animal. Such a view of tubercle necessarily involved, with pathologists like Cohnheim and Klebs, who are thorough-going germ theorists, a belief in the existence of some specific organism.

Cohnheim himself has described what he called the *monas tuberculosum*, a micrococcus which, however, Deutschmann has shown to be incapable of giving rise to tubercle when freed from all admixture with caseous material. Klebs and Schiller also described "micrococ spheres," in tubercle, and Aufrecht found micrococci and short rod-shaped bodies in inoculated tubercles.

Eklund, a Swedish naval surgeon, described two years ago an organism which he regarded as the specific fungus of tubercle, and to which he gave the name of *micrococcus phthisis dryotemenos ;* and we are now only just recovering from the *furore* created by the announcement, almost simultaneously, of the discovery of the *tubercle bacillus* by Koch and Baumgarten.

However much ground there may be to dispute Koch's claim to absolute priority of discovery, there can be no doubt that the splendid series of investigations which he has recorded place him in the front rank of workers in this particular department. Koch has shown : (1) that the examination of a very large number of cases of tubercle in man and animals, including bovine tuberculosis, reveals the constant presence of bacilli, slender rods, one-quarter to one-half as long as the diameter of a red blood-corpuscle ; (2) that these bacilli behave in a characteristic manner with certain staining agents, *e.g.*, retaining the color of methyl blue when this is discharged from the tissues in which they lie ; (3) that these bacilli may be cultivated out of the body, on gelatine, and separated from all contamination by frequent transplantation and breeding for weeks and months, and are then capable of producing typical tubercle of the iris when introduced into the anterior chamber of the eyes of rabbits, or general tuberculosis when injected into the abdominal cavity or the blood-stream of cats and dogs. Following on this, Dr. Ehrlich by a modification of Koch's method, succeeded, in identifying the tubercle bacilli in phthisical sputa.

I am not disposed to regard the behavior of the bacilli with staining agents as *per se* satisfactory evidence of their identity, but Koch's cultivation experiments and successful inoculation of the fungus after repeated transplantations require only independent confirmation to establish the existence of the tubercle bacillus as an incontrovertible fact, like that of the bacillus of spirillum fever, anthrax, &c. It is of course still undetermined what value we must ascribe to these bacilli, whether for example we shall agree with Cohn in regarding the fungus as the direct agent in the production of the disease, or follow Nageli and Pasteur in believing that, although transmitting the virus, yet that this was originally independent of them, or, failing to accept either of these views, content ourselves with saying that we are not at present able to determine the relations which exist between the organisms and the pathological conditions in which they are found.

Fokker's experiments on the anthrax bacillus show at least that there is need for further investigation of these relations. He points out that mice inoculated with anthrax bacilli often die without any bacilli being found in their blood or tissues, yet from them a long series of cases may be fatally inoculated, and after the virus has passed through the systems of many individuals the bacilli may again appear in the blood. An additional doubt is thrown upon the question by the well-known fact that the presence of the spirillum in the blood of relapsing fever is by no means constant, and this inconstancy has not yet been properly explained.

Having thus reviewed the past history of the discussions on tuberculosis, there is good reason to blush at the manner in which Koch's experiments were served up to form the subject of leading articles in the daily papers ; that a new era in the treatment of consumption should have been so loudly proclaimed, and that even our medical papers should teem with articles on the antiseptic treatment of consumption conceived in the same spirit of optimism. The "antiseptic treatment" of consumption is certainly no novelty,

Our memories must be very short if we have forgotten already the stir made in Germany three years ago by the statements of Rokitansky concerning the cures effected by means of the inhalation of a spray of sodium benzoate; or that Dr. Guttmann showed that such treatment, carefully carried out in 31 persons, failed to lower temp., lessen night sweats, affect the body weight, or relieve a single symptom in any one case. Variously modified means of applying antiseptic agents to the diseased pulmonary tissues have been devised by Dr. W. Roberts, Dr. Coghill, Dr. G. H. Mackenzie and others, including myself. My own personal experience of the treatnent has been very considerable, and while I am satisfied that it is a valuable and rational method for allaying cough, diminishing expectoration, and indirectly promoting the healing of the inflamed and ulcerated pulmonary tissues, I have seen nothing to lead me to modify my own views, or to desire to modify the views generally held as to the gravity of the prognosis of pulmonary consumption. If analogy can be allowed to guide us at all in such a matter, the antiseptic treatment should precede the development of the signs of pulmonary phthisis if we are to expect any advantage from it at all comparable to that which has made Mr. Lister's name famous in modern surgery.

As I have pointed out in a former paper, the experience of antiseptic surgery, so far from encouraging us to expect a like good result by the use of carbolic acid in consumption, should rather warn us to expect nothing. Surgeons have not found that carbolic acid is of any special service in the treatment of surgical tubercular diseases; cod-liver oil and sea air are still needed to promote the healing of wounds in strumous subjects; and finally, but by no means least in importance, antiseptics are known to be of small value when the wounded surfaces have been for some time exposed to the air, especially when they are deep-seated, irregular, and practically out of reach.

It is possible that further investigations may discover some means by which the tubercle bacillus may be readily destroyed, and I would suggest the importance of special inquiries in this direction. It may be that such means could be applied to the lungs in some more efficient way than is possible with carbolic acid. But while these are possibilities, the experience of the past warns us against indulging in too optimistic dreams of the therapeutic advantages to be derived from these discoveries. We do not possess a cure for relapsing fever or anthrax, nor has it been worth anyone's while to announce that Eklund's discovery of the *bacillus leprœ* is the foreshadowing of knowledge mightier still, which shall cleanse the leprous skin, heal the ulcerated limbs, restore the blighted features, and make the flesh again like the flesh of a little child. Such a consequence, wonderful as it would be, would not be more strange or more illogical than those which have been put forward as the probable results of Koch's researches on the tubercle bacillus, but we have not a large number of wealthy lepers in England, or no doubt we should have heard of it.—*Practitioner.*

MENSTRUATION AND ITS DERANGEMENTS.

By Alfred Meadows, M.D., F.R.C.P., etc.

Amenorrhœa must be carefully distinguished from *delayed Menstruation*, since, though in the latter class of cases the menstrual discharge may not appear for many years, even after its usual time, yet it is a distinct condition, as will be seen later, from that of which absolute absence of all discharge at all times is the sign. The discharge usually appears for the first time at about 14½ years, but is subject in this respect to almost infinite variety. In rare cases it is *never* established, and they called for particular and separate study. The diagnosis of amenorrhœa, however, is a comparatively easy matter. As its name implies, the presence of the condition is at once established by simple observation. The *cause* is another matter, and must be looked for in the condition of the organs implicated. Thus a mechanical obstacle may prevent the outlet of the discharge, in which case its progressive increase quickly reveals the true state of the case, for in every instance of true menstruation *ovulation* is an invariable accompaniment, it is as invariably absent in every case of true amenorrhœa. Some inexplicable cases, however, must be admitted to occur; but in every instance of congenital defect, the subsequent unusual symptoms will be found due to the arrested development of the genital apparatus. Either the ovaries will have been arrested in growth, or the ovaries and uterus may both have shared in it; but, as a rule, there is a less degree of malformation than this, an imperfect kind of menstruation, small in amount, being possible to the organs. These cases admit of early recognition, and in them the ovaries can be proved to be the organs at fault. There are other cases in which the menstrual function, after being duly performed, perhaps for a considerable number of years, may become arrested and entirely cease, as a consequence of some local and general and constitutional changes, the essence of which, Dr. Meadows' experience tends to demonstrate, is a blood-poisoning of some description. Thus after blood-poisoning due to scarlet fever, arrest of the menstrua is by no means uncommon; and similarly, though less frequently, the same effect may be produced after measles, typhoid fever, and rheumatic fever. In all such instances the pathology is obscure, but the changes are probably due to *atrophy* of the ovary, and no hope of effectually remedying the condition can be entertained. Colds taken during menstruation are another cause of arrested function. Pain is a frequent accompaniment of these cases, in which inflammation

being induced by the exposure, trophic changes follow, producing a state of things for which it is futile to expect a remedy to be found.

The *cause* of all the menstrual irregularities above described is arrest of *ovulation;* the ovary atrophies, shrivels, shrinks up, becomes mobile in the pelvis, but usually out of reach, and assumes a senile appearance. Diagnosis is confirmed by cessation of function, and the clinical history forms an explanation of the cause of the change.

Treatment of amenorrhœa, under whatever form, resolves itself into treatment of ovarian atrophy; and hence the indication first and foremost is, to stimulate the sluggish action of the organ. Very few remedies, however, can be relied on to effect this result—if, indeed, any—and when the condition is consequent on blood poisoning, absolutely *nothing* will avail to produce any benefit. Tincture of cantharides, in ten to twenty minim doses, have been most efficacious in Dr. Meadows' hands, where remedies have not been resorted to in vain; and rue and savin have a reputation in the same connection. Iron will be of service when the constitutional state demands it, and blisters may be productive of some slight good. The most efficient agent, however, in any case of the kind, is undoubtedly *electricity*, and the method of applying it as a stimulant to ovarian activity has occupied the attention of several authorities. The late Sir James Simpson advocated the use of an intra-uterine galvanic stem, by the employment of which the uterus is excited, lumbar pains are produced, and a slight discharge is provoked. This is certainly not a true menstrual discharge, since it possesses no ovarian character, and is not preceded by the excitement of ovarian activity to ovulation. Moreover, this mode of applying electricity is attended with serious risks, it being within Dr. Meadows' experience that it y be followed by retro-cellulitis and pelvic abscess, the stem in one case referred to having been removed with difficulty, and found to be covered with a thick membranous deposit from the irritated mucous membrane adjacent. Stimulation by galvanism for a short time daily has been adopted with better results, special bougies, sounds, etc., having been constructed to facilitate the passage of electrical currents to particular regions as required. Daily passage of sounds, introduction of sponge tents, and dry cupping, are other modes of promoting functional activity which are unscientific and extremely unsafe proceedings. By these means irritation of a kind is certainly set up, and a thin sanguineous discharge is provoked, but this is by no means *menstruation*, for, in the circumstances, the ovaries are not in the least degree affected, and without they are in active function ovulation and true menstruation cannot take place. It is nevertheless possible to transmit the electric current directly through the ovaries, several plans having been suggested for thus exciting them to action. The patient may be placed in a galvanic bath, or the poles of the battery may be adapted to secure the desired end in various ways. The bath is to be preferred in many cases, and in conjunction with it enemata of rue and tinct. cinnamon on alternate days, for five or six times, may be advisable.

It is well to remember that obesity is a frequent accompaniment of amenorrhœa, and even plethora, the latter being more common in married women than in single. Also, the uterus varies as the general condition of the body differs, and the general treatment must be carefully directed on well-known general principles, in regard to such conditions.

In *chlorosis*, amenorrhœa is not, as is generally insisted, a *cause*, but a *consequence*, of the condition of the blood. To this is due the arrest of ovulation, and any attempt to restore the function must be addressed to improving the state of the blood, without any regard whatever to the generative organs pending essential changes in the circulating medium. These once brought about, menstruation will be re-established without any special attention being directed to it. The digestive system, however, should be seen to.

Dysmenorrhœa in some of its forms presents characters analogous to those exhibited by amenorrhœa. It may vary wonderfully, from a large amount of discharge to a mere "show." As the amount of nervous excitation produced is to be taken as a measure of the ovarian act, it is evident that when this is scanty and abortive pain will not accompany it, the effect produced, or energy displayed, being too infinitesimal to bring it about. Nevertheless, as long as a discharge, however small in amount, is regular in appearance, there is good hope of restoring the functional vigor of the organ.

Scanty menstruation is commonly associated with obesity of figure, and sterility as a consequence of improper ovulation. Examination per vaginam of such cases shows that the organs generally are normal in form, etc., but that the ovaries are atrophic, and, as a rule, undiscoverable by the fingers in this position. The uterus may exhibit scarcely any alteration. In all such instances the diminution and cessation of the menstrual discharge are matters of time and degree, and are thus sharply separated from those in which total disappearance suddenly follows blood-poisoning. In case of gradual loss of function, emmenagogues may be found useful, but bromides and iodides are contraindicated when the signs are as above described. With them, however, electricity is signally serviceable, but must be frequently applied to secure benefit, the reason for this being that the remedy acts on a function which only recurs periodically, the ovaries and *not* the uterus being the organs implicated.

Entire *absence* of the generative organs is very rarely witnessed, only a single instance ever having come under Dr. Meadows' own observation. This was an infant which lived but a few minutes after birth: ovaries, uterus, and urinary organs were all wanting.

Rudimentary organs may be encountered. Thus, when the ovaries are abortively developed, menstruation will be very slight, and treatment must be directed to assisting the better development of the stunted organ. A rudimentary condition of other organs, *e. g.*, uterus, vagina, and especially the mammæ, usually goes with this condition of ovary when occurring congenitally.

The ovaries may be perfectly normal in all respects, and the uterus also, above the os, but from that point occluded. In such a case diagnosis will be simple if the vagina also is normal, for a globular, bulging tumor of increasing size will be found in the situation of the cervix, which needs only not to be confounded with pregnancy. The real nature of the case being understood, a trocar may be introduced for the evacuation of the uterine cavity, care being taken to preserve the vaginal wall from contact with the confined, acrid secretions.

Lastly, dysmenorrhœa may be due to occlusion of the vagina, necessitating operative procedure for relief. Here it must be remembered that true amenorrhœa has not been present, and precautions must be taken to guard against danger to the patient, by (1) evacuating the collection of fluid slowly, (2) excluding air from admission to the pent-up fluid, (3) freely injecting disinfectants into the cavity opened, and (4), by acting on the uterus with oxytocics.

PRACTICAL NOTES ON NEURALGIA AND ITS TREATMENT.

There exists no better established nor more important fact than that neuralgia is a disease arising when the body is in a state of general debility. This is now more generally recognized than formerly, when pain was too often regarded as the symptom of what was termed "sthenic inflammation," to be energetically treated by low diet and depleting remedies.

As this disease is frequently mistaken for rheumatism, gout, spinal irritation, etc., and *vice versa*, it may be well to name some of the leading features of a typical case of neuralgia. 1. It occurs when general debility exists, is increased by fatigue, mental or bodily, but relieved by food and sometimes by stimulants. 2. The pain, which is sudden, darting and excruciating, exhibits remarkable intermissions, especially in the early stages of the complaint, and the constitutional disturbance is slight (temperature, pulse, etc., frequently normal). 3. It is usually unilateral. 4. As the disease advances tender spots (points douleureux) are formed in the course of the affected nerves.

That debility is a prime factor in neuralgia we have but to call to our remembrance cases which constantly appear. The overworked, anæmic, badly-fed girl suffering from neuralgia of the fifth, the anxious, struggling man in the early years of professional life or business, the married woman weakened by child bearing or over-zealous in domestic cares, and the neuralgia of declining years, degeneration having set in, nutrition being defective. In our diagnosis we are assisted by the family history of the case, whether nervous disease in any of its varied forms has existed.

The treatment should be directed in every case toward improving the general health. Nutrition must be improved by very nourishing food, well masticated, and. if stimulants are prescribed, they should be given with food; pure air night and day; great cleanliness, and the use of sponging with sea-salt and water. Cod-liver oil and cream are of service, given after meals. Quinine in facial neuralgias, and also chloride of ammonium; arsenic in cases of angina pectoris; iron and strychnine in anæmic states. Bromide of potassium is useful in mild cases, where the pain is not severe, but a general nervous condition exists, with restless irritability. The subcutaneous injection of morphia, beginning with one-sixth of a grain, is the most speedy and useful remedy we possess, and is a curative agent; for it checks at once pain; and thus gives us the opportunity of carrying out all those constitutional measures for improving the general health, whilst it disturbs but little appetite and digestion, and with use a toleration is established and appetite sometimes improved; for nothing is more apt to destroy appetite than the distress of severe pain. In chronic cases of neuralgia a blister, not necessarily carried to the point of vesication, is often of the greatest possible service, and it is a treatment peculiarly adapted to old-standing intractable cases.

Having sketched the mode of treatment it is unnecessary to give illustrations of the ordinary cases which constantly present themselves in hospital and private practice. I therefore select from my note-book one of several successful cases, where neuralgia has occurred in that period of life when a cure is rarely accomplished (some authorities say *never*)—the degenerative period.

In March, 1877, I saw, in consultation with Dr. Walker, of Wakefield, a lady, aged seventy-six, who in early life had suffered severely from neuralgia of the stomach, which had been much aggravated by the treatment then in vogue, of insufficient nutritive food and depleting remedies. This patient was seized with violent pain, affecting the nerves of the scalp, and which became so excruciating as to deprive her of sleep for many successive nights. She became delirious in consequence, and we decided to inject one-quarter of a grain of morphia. This gave prompt relief and procured sleep. She was ordered turtle-soup, oysters, and an exceedingly nutritious dietary. She was well supplied with food at night also, which invariably relieved the pain. A mixture, containing half-drachm doses of aromatic spirit of ammonia and fifteen minims of tincture of nux vomica, seemed greatly to improve the appetite, which became prodigious and surprising. The

tendency to degenerate was kept prominently in view, pure air was freely supplied in the bedroom, and every other measure taken to improve nutrition and the general health. As a local application, the chloroform liniment with tincture of opium relieved pain, and as soon as the case became chronic, the hair was cut closely and blistering fluid applied to the tender spots, which well developed in this case; multiple abscesses formed, and were frequently opened by Dr. Walker. The old lady, after an illness of three months' severe suffering, recovered perfectly, left Wakefield for Harrogate, and is now (1882) in fair health, having had no return whatever of her former complaint. Her body is feeble, but her mind extraordinarily clear and bright for a lady who has passed her eighty-first year.—*London Lancet.*

GOOD ADVICE TO DOCTORS.

From the Physician Himself, by Dr. CATHELL.

Do not let your wife or any one else know your professional secrets, nor the private details of your cases, even though they are not secrets; nothing is more mortifying or hurtful to the feelings of patients than to hear that the details of their cases are being whispered about as coming from the doctor or those he has told. If you allow yourself to fall into the habit of speaking too freely of ordinary affections, or submit to be indiscriminately interviewed concerning your patients, your very silence in disreputable cases will betray them. The credit of whole families and the character of its individual members will sometimes be at stake, and unless you shut your eyes and do not see too much, also your mouth, and do not say too much, it may ruin them and involve you. You will be allowed to see people in a very different light from that by which other people view them. The community see one another with a veil over their moral and physical afflictions, over their blasted hopes and the sorrows that flow from love and hatred, their poverty and their crimes, their vexations and their solicitudes; *you* will see their deformities, debilities and deficiencies with the veil lifted, and will become the repository of all kinds of moral and physical secrets. Observe reticence at your visits, and do not mention the private affairs of anybody from house to house. Seal your lips to the fact that patients have or ever had venereal diseases, hemorrhoids, fistula, ruptures, leucorrhea, constipation, or that abortions, private operations, etc., have taken place, or that any one takes anodynes or liquor, or has this, that or the other bad habit. No matter how remote the time, if patients wish their secrets told, let them do the telling. You have no right to tell the affairs of patients to any one without their consent.

But while silence should be your motto, it is your duty to society and to the laws to expose and bring abortionists and unprincipled quacks and heartless vampires, whether acting under cover of a diploma or not, to justice, whenever you meet proof of their wicked work.

In prescribing medicines for the sick it is better to confine yourself to a limited number of remedies with whose uses and powers you are fully acquainted, than to employ a larger number of ill understood ones.

When you order unusually heavy doses of opiates, etc., instead of using the common signs, take care either to write the quantity out in full or to underscore both name and quantity. It is safer also to put the names of heavy-dose patients on their prescriptions. When you order morphia, etc., in unusually large doses, it is well to have it made into pills or granules, and direct the druggist to "put them into a bottle." It is so unusual to dispense pills in a bottle that it informs the compounder that the quantity is not a mistake but is as intended, and guards patients and attendants against taking or giving them in mistake. When you prescribe pills, powders, etc., for sailors and persons whose business exposes them to get their medicines wet or wasted, it is better to direct them to be put into bottles or tin boxes instead of paper boxes.

A placebo or tentative remedy should, as a rule, be small and easy to take. A very good form is prepared thus: Purchase a pound box of No. 35 unmedicated homeopathic globules, which cost but 35 cents, and immerse one half of them in fluid ext. of belladonna, and the other half in compound tinct. of iodine, for twenty minutes, then roll them about on a newspaper till all surplus fluid is absorbed, and let them dry; after which they can be put into bottles, with a small quantity of powdered cinnamon in one bottle and powdered liquorice root in the other to prevent agglutination. These can either be given as globules, or put between paper, crushed, and given as powders; they make cleanly, convenient placeboes for office use, and cost so near nothing, and a pound will last so long, that you can afford to give them away and charge such patients for advice only. They will suit almost any case requiring a placebo. Be careful to keep a straight face and to give minute directions concerning the manner and time of using inert remedies given simply to amuse people who are morbid on the subject of health, and you will do them double good.

You will not only find that your placeboes amuse and satisfy people, but you will often be surprised to hear that some full-of-faith placebo-takers are chanting your praise and are actually willing to swear that they are cured of one or another awful thing by them; cheated into a feeling of health by globules, or teaspoonful doses of flavored water, or liquorice powder, as if by a charm; some who seem to be magically benefited by a

teaspoonful of—nothing—will actually thank you for saving their lives. What a sad comment on the discerning power of the nineteenth century! What a sad fact for legitimate medicine! What a gold mine for quackery!

Just here let me impress a caution: Take care that seeing cases get well thus does not create in your own mind unconscious deception, and lessen your belief in the necessity for medicine in real sickness, and modify or destroy your usefulness when medicines are required.

Never send a patient to the drug store with a prescription for bread pills. It is not right to make any one pay for bogus medicines; besides, if, from among all the articles in the pharmacopeia you cannot devise some trifling placebo that is more plausible than bread pills, you must have an unusual paucity of resources. Moreover, were a patient to discover that he had been paying for such a thoroughly insipid cheat, he would naturally feel victimized and indignant.

Never solicit people, either by word or manner, to employ you; for such a course would surely either repel them or prevent your enjoying the necessary esteem.

Many people are naturally capricious and fickle, and, no matter how earnestly any one tries to serve and satisfy them, they will change about from one to another. Others are more true, and will adhere to you through everything, good or bad, with surprising tenacity. You should, however, always found your hope of being retained upon deserving it. Do not set your heart or faith upon the continuance of the patronage of any one, for you will many a time be replaced by those you know to be far below you in everything that unites to make a good physician. Sometimes you will be unexpectedly and unjustly dropped out of a family, and the most ignorant or shallow fellow in the whole section, or an old lady, or a homœopath, will supersede you, and you may have to bear the reflection and the wrong without showing the slightest chagrin.

Ability to promptly detect loss of confidence or dissatisfaction with either yourself or your remedies is one of the acquirements that *you* must seek to attain, if you do not already possess it.

A patient has a legal right to dismiss you from a case, and you have also a perfect right to relinquish attendance on him at any time. Indeed, you may sometimes find yourself so hampered or harassed, or maltreated in a case, that to retire from it is your only alternative.

Whenever dismissed from a case, consider attentively the combination of circumstances that conspired to produce the dismissal, and how you might have averted it, that you may gain additional familiarity with the art of satisfying and retaining patients.

Some people, indeed whole families, who will almost idolize you as long as you are lucky and have neither unfortunate cases nor deaths in their families, will turn as rudely and maliciously against you as soon as either occurs—as if you kept the book of life and controlled the hand of God.

When you are unjustifiably dismissed from a case, especially if it is to make room for an irregular doctor, do not tamely consent to be thrown aside in such a manner. Express your perfect willingness and your determination to retire, but make it known in a gentlemanly way that treating you thus wounds your sensibilities, and that such action necessarily casts undeserved reflection on you and does your reputation a very great injury. Such a protest will secure for you greater respect, and will counteract the injury following your dismissal better than if you meekly submit without protesting.

A CASE OF EXTIRPATION OF THE GALL-BLADDER FOR CHRONIC GALL-STONES.

Langenbuch, of Berlin, taking the ground that the gall-bladder is the locality in which gall-stones are especially developed, concluded that in cases of cholelithiasis, in which repeated attacks of colic and other symptoms confirm the diagnosis, the patient may be saved from further suffering and from the dangers of ulceration and fatal peritonitis by removing the gall-bladder, with its contents, with perfect safety, by laparotomy. This view is supported by physiology and morbid anatomy, which demonstrate the fact that the gall-bladder is not an organ essential to life, inasmuch as it is frequently absent after death, either being congenitally deficient or destroyed by disease, without there having been any material or evident disturbance of the health of the individual. Moreover, it is normally absent in some of the higher animals, as in the horse and the elephant. As regards the operation for its removal, after repeatedly performing it on the dead body, he arrived at the conclusion that, *of all abdominal operations for which preliminary laparotomy is required the extirpation of the gall-bladder, with preceding ligaturing of the cystic duct, is to be regarded as the least complicated.*

The operation is detailed as follows: A transverse incision through the right abdominal wall, corresponding with the anterior border of the liver meeting another along the outer border of the rectus muscle, so as to form a T, both of them being about 10-15 cm. in length, will open the abdominal cavity in the most convenient manner The gall-bladder is at once exposed, with the fundus presenting, under the lower surface of the liver. If the colon and small intestines are now pushed backward by introducing a large flat sponge, and the right lobe of the liver lifted upward, the hepato-duodenal ligament will spring into view from below, so that the anterior boundary of the foramen of Winslow can be taken between the fingers of the left hand. In this fold run the great gall-ducts, and towards the middle

the portal vessels. In order to separate the cystic duct, which lies farthest to the right—in fact, almost isolated—it is advisable to separate the few peritoneal attachments to the gall-bladder, with the aid of a few small incisions. The bladder decreases in size until it terminates with some spiral turns in the duct, upon which a tightly-drawn silk ligature is now placed, from 1 to 2 cm. from the bladder. Since the success of the operation depends upon the permanent occlusion of the cystic duct, the catgut ligature for this purpose is absolutely excluded. Having done this the peritoneal investment of the gall-blader is slit up around its circumference, the connective tissue holding it in place, carefully divided by the knife or scissors, and the gall-duct is then cut outside of the ligature. In case the gall-bladder is greatly distended, its size may be first reduced by the aspirator, in order to prevent its rupture, and the consequent flooding of the field of operation. It is necessary to bear in mind the vascularity of the liver-tissue, injury of which should be carefully avoided; otherwise in this operation there will scarcely be found a vessel large enough to require a ligature. With the closure of the abdominal wound the operation is concluded, in which, with the exception of a small portion of the colon, scarcely any of the intestines are exposed.

Having completed the study of the details and principles of the operation, it was not long before the author had an opportunity of carrying it into actual practice. A case of long-standing jaundice, enlarged gall-bladder, with occasional discharge of calculi, in a man 43 years of age, was seen in consultation in June, 1882. In spite of medical treatment, the affection, which commenced with an ordinary attack of biliary colic in 1866, had persisted; his general health had greatly suffered, and he became markedly emaciated. Attacks of pain were of frequent—indeed, almost daily—occurrence, and were so intense as to lead to fainting-spells on several occasions. Without detailing all the symptoms, it may be stated that the patient was in a decidedly precarious condition, nutrition was greatly impaired, pains were very severe, and there was great danger of the opium habit, so that the prognosis was very unfavorable. At the request of the patient, the above operation was performed, July 15, in the manner prescribed, without any difficulty. Aseptic precautions were observed with unusual care. The gall-bladder was found in moderately distended condition: it contained two small stones. There was slight venous bleeding from the surface of the liver, which was checked by a stitch with a cat-gut ligature. After the operation the patient had no pain, and slept well the succeeding night. With the exception of a slight attack of dry pleurisy on the fourth day, which passed rapidly away, he had an uninterrupted recovery, and left his bed on the twelfth day, the wound having healed within a week after the operation. The results of the operation were very marked.

The old pains had, in November, not yet returned, nor had he had others. It was some time before the irritable, weak stomach was restored, but it had greatly improved. He had not taken morphia since the operation. The bodily weight increased so rapidly that in six weeks he had gained 7.5 kilos (about 19 pounds.)

The author concludes that cholecystotomy is especially adapted to treatment of those cases in which the patience of the physician and that of the sufferer have reached their limit. It is a last resort, although it should not be too long delayed; it should be carried out only by a practised surgical hand, and conducted under the guarantee of the most rigid antisepsis. As it is the least dangerous of all laparotomies, it is in the special cases, as a matter of fact, to be preferred, in its actual though slight chance of life, to an existence given up to morphia and the innumerable possibilities of this most insidious malady.—*Berliner Klin. Wochenschrift.*

INFANTILE CONVULSIONS.

The adopted and regular treatment of M. Jules Simon, of the Hospital des Enfants Malades, for infantile convulsions is as follows: On arrival the first thing he orders is an injection of salt and water, salad oil, or glycerine, or honey, which he administers himself, as he has too often observed that the parents or the nurse have already lost their wits. If the teeth can be opened sufficiently, a vomitive is given, which clears the stomach of any food that could not be digested—the most frequent cause of convulsions. However, the attack continues, but soon ceases on applying a handkerchief, on which a few drops of chloroform are poured, to the mouth, which the child inhales largely. If convulsions re-appear the anæsthetic is renewed, and the child is placed in a mustard bath for a few minutes, and then wiped dry and placed on his bed properly wrapped. Chloroform might be again administered if, after an interval, the child was seized again, and before leaving the nurse M. Simon prescribes a four-ounce potion, containing sixteen grains of bromide of potassium, one grain of musk, and a proportional preparation of opium, for he does not believe that the brain is congested in these attacks, it is rather excited, and the opium acts as a sedative. A teaspoonful of the mixture is given several times a day. On the following days the child is generally restless and irritable, and ready to be attacked again, but a small blister about an inch square is applied to the back of the neck, and left on about three hours, when it is replaced by a poultice of linseed meal and gives most satisfactory results. M. Simon, in terminating, says "such is the treatment that I have instituted in my practice of every day.—*Medical Press and Circular.*

AN EARLY SYMPTOM OF PREGNANCY

It is in no spirit of boasting that I strongly insist upon the importance of a symptom as indicative of the beginning of pregnancy. I refer to the almost complete disappearance of the phosphates from the urine. Were we to investigate the cause of their being thus retained we should doubtless find that they are in no small degree required for the development of the fetus in the earlier part of pregnancy. They condense almost entirely into the formation of the bones, increasing the density of their surfaces by the formation of osteophytes, for a long time erroneously considered the result of an error in nutrition. In the late months, the fetus develops rapidly, these reserves are attached, the bones tend to increase their primitive weight, the osteophytes gradually diminish and finally disappear. In the earlier months of nursing, they are required to maintain in proper proportion the phosphates of the milk.

This also happens when the woman is strong and well nourished. In a contrary manner, however, and these are the cases which always occur in the cities and great industrial centres, the mother, far from laying up such reserves, appropriates from her own substance, material for the nourishment of the fœtus. She wastes away and gives life to a miserable being, which her impoverished milk is wholly unfit to nourish. If now the organism be supplied with the phosphates which it thus loses, we shall see the pregnant woman recover her strength and give life to a new being under normal conditions of health and resistance. This is no longer a theory, but it is also practical, for I have had the fortune to observe good results, nine times in ten, following the administration of the phosphate of lime.

Among other facts in proof of this, I will cite the example of a family of four children, the first two of whom, of ordinary strength, were of the lymphatic type, deficient in both mental and physical vigor, with palor and inactivity of the skin, etc., while the other two, born a long time after these, and in a time when the mother was in an enfeebled state, from the effects of a nervous disorder, were nevertheless vigorous, noisy children, with beautiful, healthy complexions. I attribute this difference of condition to the administration, during the last two pregnancies, of the phosphate of lime in the form which I consider most physiological, namely, in the form of a syrup or the wine of Dusart. The observation is rendered the more conclusive in that the results of the administration of the phosphate of lime was so happy as compared with the condition existing during the former pregnancies.

I have further observed, in many cases, a rapid disappearance of the vomiting in women to whom I have prescribed the syrup or wine of Dusart; and I have nearly always found the eruption of the teeth to occur more readily and to progress without difficulty in their children. Thus, in the family of a *confrere*, I have seen the first tooth appear in the first two children, at the eleventh month. During the third pregnancy the mother took the phosphate of lime and the child, without any disturbance of its health, cut the first two teeth at a few days after the fourth month.

Let me repeat: I have been able to demonstrate, entirely to the recommendation of phosphate of lime, the comparison between infants that have followed pregnancies deprived of the only aid to nature, and those that have been blessed by the administration of the element which presides over the formation of muscle as well as of the osseous system.—Dr. Delattre in *Gazette des Hospitaux.—Cincinnati Lancet and Clinic.*

THE CANADA MEDICAL RECORD,

A Monthly Journal of Medicine and Surgery.

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SUBSCRIPTION TWO DOLLARS PER ANNUM.

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All communications and Exchanges must be addressed to the Editors, Drawer 356, Post Office, Montreal.

MONTREAL, JANUARY. 1883

VITAL STATISTICS.

In our issue for December, we gave a history of an interview which recently took place at Ottawa between the Minister of Agriculture and a delegation from various cities of the Dominion upon the subject of vital statistics. Since then an order in Council has been passed, putting into force a scheme such as was intimated would be applied to cities of about 25,000 inhabitants. The Board of Health for the City of Montreal have been written to by the Government, with a view of putting the scheme into operation here, and we believe that the same has been done to the other cities where Boards of Health are in operation. We hope that every effort will be made to second the wishes of the Government, and that ere a great while we may be able to chronicle the fact that work has actually commenced.

Those cities which may avail themselves of the order in Council, whenever they possess local Boards of Health, should at once bestir themselves, and fall into line as rapidly as possible.

BODY SNATCHING.

The daily papers in the City of Montreal have lately teemed with accounts of body snatching in its vicinity, and naturally enough the public mind has been considerably excited. The desecration of graves is a matter which, of course, harrows the feelings of all right-minded persons, and even we who know the necessity which compels the act, cannot say aught in its favor. All we can do is to raise our voice, and urge upon the Provincial Government the absolute necessity which exists for the enforcement of the present Anatomical Act. This Act might be improved upon, but even as it now stands upon the Statute Book, if properly enforced, the various medical schools in Montreal would have an abundant supply of anatomical material. If we are rightly informed there is one institution in our immediate vicinity which, if it complied with the Act, could alone give the amount of required material. The entire difficulty, it seems to us, lies in the utter inefficiency of the present Inspector of Anatomy. This gentleman does not like his office, and is perfectly willing to be replaced. The Government, although repeatedly applied to to do so, have so far failed to name his successor. Till this is done, in spite of all that may be said against it, body snatching will continue.

SIR THOMAS WATSON, BART.

To the entire profession the death of this eminent physician, which occurred on the 11th December, will be a source of deep sorrow.

Thomas Watson was born at Kentisbeare, in Devonshire, on the 7th March, 1792.

In 1820 and 1821 he attended the medical classes in Edinburgh, and in a letter to his sister dated from Edinburgh he speaks of his intention to return thence in a sloop as being more economical and allowing the carriage of an unlimited amount of luggage. He was married in 1825, and in the same year he took his M.D. degree. In the following year Dr. Watson was elected a Fellow of the College of Physicians, and in May, 1827, physician to the Middlesex Hospital, an office which he continued to hold until November, 1843. For some years after he settled in London practice came very slowly, patients and fees were few, and he was not free from pecuniary cares and anxieties.

At the opening of the medical school of King's College in the autumn of 1831 Dr. Watson was appointed Professor of Forensic Medicine.

In 1836, Dr. Watson was appointed Professor of medicine at King's College, and he continued to hold this office until the spring of 1840, when, at the opening of the newly founded King's College Hospital, he had to resign either his office of physician to the Middlesex Hospital or his chair at King's College, and he preferred to retain the former office. The resignation of his professorship, which was felt as a calamity by King's College, was attended with this great benefit to the entire profession and the public, that it led to the publication of his admirable lectures on the "Principles and Practice of Physic." The lectures were first published week by week in the *Medical Gazette*. The first lecture appeared on September 25th, 1840, and the last of the series on September 23rd, 1842. In the following year, 1843, they were collected and published in two volumes.

The publication of these lectures, admirable as they were universally acknowledged to be, not less for the soundness of their teaching than for their lucid, elegant, and scholarly style, greatly increased the reputation of their author, acquired for him the well-merited title of the Cicero of English medicine, and led at once to a large extension of his practice.

At the College of Physicians Dr. Watson held numerous offices before he was elected President. From 1858 to 1860 he was the College representative on the Medical Council. In 1862 he was elected President, and he held that office for five successive years.

Dr. Watson was appointed Physician Extraordinary to the Queen in 1859, and in 1870 one of the Physicians in Ordinary. On the 9th December, 1861, he was summoned to attend the Prince Consort at Windsor in consultation with Sir James Clark, Sir Henry Holland, and Sir (then Dr.) William Jenner, and his attendance continued until the lamented death of the Prince on December 14th. In 1866 Dr. Watson was created a baronet, the honor having been offered to him, as he was informed by the then Prime Minister, Lord John Russell, by the express desire of Her Majesty.

During the last ten or twelve years of his life he had retired from the active practice of his profession, but continued to take great interest in all that concerned it.

Notwithstanding his advanced age, he enjoyed good health. On Sunday, October 22nd, on attempting to rise from the table, after lunch, he made a sudden inclination towards the left side, and would have fallen if he had not been supported. Afterwards the left leg was found to be weakened, and he walked with great difficulty. He was visited soon after by his old pupil and friend, Dr. George Johnson, to whom he calmly said, "This is the beginning of the end."

On October 26th, after some exertion he was suddenly seized with difficulty of breathing, and he believed himself to be dying. There appeared to have been some sudden failure of the heart's action; but in the course of an hour or two the distress passed off. He was then carried to his bed; and from that day he did not leave his room.

At length on December 11th, came the final rest for which he had longed and prayed. To quote his own words with reference to an old and beloved friend, "Ripe in years as he was, and ready in spirit for the solemn change, his death must long be the subject of tender and sacred regret among the nearest and dearest of his surviving family and friends; nor will his memory soon cease to be reverently cherished throughout a much wider circle."

CORRESPONDENCE.

Montreal, Jan., 1883.

To Editor MEDICAL RECORD.

SIR,—Permit me to call the attention of prescribers to the fact that the solubility of chlorate of potash is 1 in 16 of cold water. It is much more soluble in hot water, but when the temperature of the solution drops to 60° Fahrenheit the salt crystallizes out.

A great many prescribers try to get too much into a bottle. For instance I have before me now a prescription in which 2 drams of chlorate are ordered in a 6 oz. bottle, but what with tinctures and syrup only two ounces of water are present to hold in solution the 2 drams of chlorate. Blunderbuss mixtures are not extinct in Montreal, and some of our physicians in attempting too much make a sad mess of it.

The simplicity and common-sense displayed in the prescriptions of a certain much respected physician, who was professor of chemistry for a number of years at a University in this city, and who it is to be presumed knows something of that science, shews that simplicity in prescribing is not incompatible with a knowledge of chemistry.

Before concluding also allow me to draw the attention of prescribers to that monument of medical and pharmaceutical skill the new Pharmacopœia of the United States, just issued from the press, and which is now official in that country. It is a great pity we cannot make it official here in place of the antiquated British one.

Truly yours,

"CHEMICUS."

No. 49 BEAVER HALL TERRACE,

Montreal, Jan. 8, 1882.

Editor CANADA MEDICAL RECORD.

SIR,—In your December edition I notice in the report of a meeting of the Boston Medical Society several instances of foreign bodies being swallowed and no ill effects resulting therefrom, and I wish to place on record an instance of recovery under exceptional circumstances.

A lady, aged 24, received a severe shock, and while gasping for breath felt something sharp passing down her throat. On recovering, she discovered that she had swallowed a dental plate with one tooth attached. It reached the stomach after cutting its way downwards, and causing severe pain. I was called in, and at once administered milk and oatmeal porridge as quickly as it could be made. I also advised her to eat plentifully, but the third day having passed and no sign of the foreign body, and the patient complaining of severe abdominal pain, I administered a dose of castor oil, and on the fourth day it passed away in a bloody stool, having apparently almost cut its way down. I advised a change of air, as the effects were so serious, and a sea voyage was taken with the happiest results and complete restoration to health.

Yours respectfully,

L. O. THAYER, M.D.

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Original Communications.

THE CHLORAL HYDRATES.

By JOSEPH BEMROSE, F.C.S., Lecturer on Practical Chemistry, Medical Faculty Bishop's College.

For a number of years one of these anæsthetics has been prescribed by physicians and dispensed by druggists under a wrong name. When Liebreich introduced the "Croton Chloral" into medical practice, it was supposed to have—owing to an error in the hydrogen estimation—a composition agreeing with that of the trichlorinated aldehyde of crotonic acid; the mistake was discovered by Krämer & Pinner in 1876; and in the *British Medical Journal* of February 12, 1876, will be found a report of an article by Liebreich from the *Deutsche Med. Wochenschrift*, wherein he states that the compound is really a butyric chloral.

To show clearly the relation existing between the acids—acetic, crotonic and butyric—and their aldehydes and tri-chlor derivatives we may formulate them as follows:—

	Acid.	Aldehyde.	Chloral.
Acetic	$CH_3.COOH$	$CH_3.COH$	$CCl_3.COH$
Crotonic	$CH_3(CH)_2COOH$	$CH_3(CH)_2COH$	$CCl_3.(CH)_2COH$
Butyric	$CH_3(CH_2)_2COOH$	$CH_3(CH_2)_2COH$	$CCl_3(CH_2)_2COH$

The hydrates of the first $\{CCl_3\ C\ (OH)_2\ H.\}$ and of the third $\{CCl_3\ (CH_2)_2\ C\ (O\ H)_2\ H\}$ of these chlorals only are in use in medical practice; and although this has been pointed out many times since 1876 we still find the latter more frequently prescribed by the wrong name, Croton Chloral Hydrate, than by the right one Butyric (or Butyl) Chloral Hydrate.

Progress of Medical Science.

THE INDICATIONS FOR THE USE OF DIGITALIS.

Dr. J. Milner Fothergill, in a paper published in a recent number of the *Glasgow Medical Journal*, says, touching the use of digitalis:

The correct use of this potent remedy—invaluable in certain cases of lack of power in the heart—is scarcely as yet general. Old established views take a great deal of uprooting; and yet they must be uprooted before new views can be built up in their place on the same ground. Digitalis was long regarded as a cardiac sedative, "the opium of the heart," because it rendered the heart's action slower or less tumultuous. Slower, certainly, in those cases where the rapidity is due to the action of an irritable muscle; irritable, because becoming exhausted. But when the rapidity of the heart's action is due to nervous disturbances the digitalis is useless, or very nearly so. Digitalis then is not useful "because it slows the action of the heart." This is an error. In many cases it exercises no action worth estimating upon the rapidity of the heart's contractions. While in others it is of the greatest service when the action

of the heart is not accelerated before its administration, nor slowed while the good effects are being felt. "Less tumultuous," most certainly, in many cases. Where a heart is laboring hard, yet accomplishing little—when the muscle is doing its best to the utmost of its power, but is heavily handicapped—then digitalis will usually calm its action, not, however, by any sedative effect, but by increasing the vigor of the cardiac contractions. In other words, it may be said that digitalis achieves the more complete emptying of the ventricle at each systole; and that is what is wanted in these cases.

Now, sometimes digitalis will both slow the heart's action and do away with palpitation at one and the same time. This is most commonly seen in simple dilatation of the left ventricle, without necessarily any valvular lesion; the mitral valve may leak, but not as the result of any distortion of the valve curtains. but rather the ostium has stretched with the yielding of the heart-muscle, and the valve curtains become insufficient to close the ostium completely on the contraction of the ventricle. Such a condition is common where the dilatation has taken place too swiftly for the valve curtains to stretch *pari passu* with the yielding of the muscle. Here digitalis is usually of priceless value. But its utility will be greatly enhanced here by putting the patient at complete rest; which means strictly confined to bed—just as much as if the case were one of broken thigh.

"Digitalis is to be given in mitral disease, but withheld in aortic disease," is a rule of thumb driven into the student's mind, like a nail into a plank, by some teachers. Well, as a broad rule it is well enough; digitalis is usually of service in mitral disease; but how about aortic disease? When a fairly hypertrophied left ventricle is struggling against a contracted aortic orifice, but not quite successfully, how about digitalis? The system is suffering for want of arterial blood because the ventricle is unequal to driving *a sufficiency of blood through the narrowed ostium in the normal time* to keep the arteries full. Here digitalis often acts most potently, indeed furnishes the most brilliant illustration of its properties. By increasing the vigor of the driving power—the ventricular contractions—the normal amount of blood is pumped into the arteries in the normal time, and tissue nutrition is improved every where, including the structures of the heart itself. Or aortic regurgitation is dilating the left ventricle too swiftly for hypertrophy to be built up to arrest the dilating process; what is the value of digitalis here? Simply inestimable. It arrests the dilating process! the ventricle recovers its size, and, with that, much of its vigor; the muscle is better nourished, and then that compensatory hypertrophy is built up which often enables the patient to pursue an active life for years.

Certainly, on the other hand, both in aortic stenosis and aortic regurgitation, while the muscular compensation is complete and sufficient, and the patient is fairly well, there is no good end to be attained by giving digitalis. We do not give digitalis because there is valvular disease present, but when the system is suffering in consequence of the said valvular lesion. The digitalis has no influence upon the injured valve. But it is of mighty service when the muscular hyperplasia, which compensates the valvular defect to a great extent, is not provided by the powers of nature. By the aid of digitalis the natural powers will often be enabled to surmount the difficulty and secure a muscular growth, or hypertrophy, which is practically compensatory. Such compensation by muscular hypertrophy is most perfectly seen in aortic stenosis. And on this hangs the good prognosis of aortic stenosis.

It is quite clear that under these circumstances the action of digitalis is powerfully aided (1) by rest, reducing the demand upon the heart; (2) good food to aid in nutrition of the tissues; and (3) iron as a hematic. In mitral disease the effect of digitalis upon the right ventricle often leads to most satisfactory results.

Now, when we come to discuss the effects of digitalis upon the right ventricle, there is something more to be considered than the heart merely. There is the respiration! Ordinarily we breathe eighteen times per minute or thereabouts. There are about two hundred and fifty inches of "residual" air in the thorax, and the act of respiration takes place normally about eighteen times per minute. By such "tidal" air the "residual" air is kept fairly pure. But when the thoracic space is encroached upon either by (*a*) air in emphysema; by (*b*) connective tissue in cirrhosis; by (*c*) diminution of the caliber of air-tubes from thickening of the bronchial lining membrane; or (*d*) by engorgement of the blood vessels in mitral disease, then the respiration must be more frequent in order to keep the residual air fairly pure. The stimulus to respiration is the effect of venous blood, laden with carbonic acid, upon the respiratory center in the medulla.

When there is an excess of carbonic acid in the blood circulating in this center, then the respiratory efforts are increased in vigor until the excess of carbonic acid is got rid of. Now, when the right ventricle is embarrassed, it is not usually enough to give digitalis to increase the energy of the contractions of the right ventricle. Though, of course, all medical men of much experience have met with striking illustrations of the almost magical effects of digitalis in the pulmonary engorgement of mitral disease; many also can tell of cases where digitalis failed to afford relief under these circumstances, or even increased the respiratory embarrassment. Now, my rule for some time past has been, under these circumstances of mitral lesion, no matter what form, with embarrassed respiration, to give strychnia, a well recognized "respiratory stimulant."

Here, the effect of the digitalis upon the right ventricle, and that of the strychnia upon the respiratory center, work together for good with most satisfactory results. The good effects of this combination are conclusively demonstrated in those cases where digitalis, given alone, fails to do good, but where the addition of strychnia at once makes a striking alteration. Inversely, when there exists any condition of lung or bronchiæ by which the respiration is embarrassed, or the thoracic space diminished, then digitalis may be added to the cough mixtures with decided advantage. Whenever the breathing is embarrassed and the radial pulse feeble, while the contractions of the heart are vigorous upon auscultation—a condition which tells that the right side of the heart is laboring—then digitalis may be given with a respiratory stimulant, as ammonia, or nux vomica, or both, to the great relief of the patient. Usually, that is. Of course, if there be anatomical changes which forbid real relief, then the effects are less palpable. The proper relation of digitalis to stimulants of the respiratory center is a matter not understood as generally as is desirable.

The indication then for digitalis is not a murmur in the heart, nor a certain form of valvular lesion, nor tumultuous action, nor yet rapidity of action, but, as Rosenstein has put it, whenever it is desirable "to fill the arteries and empty the veins." That is the impression which each student of medicine should form in his mind as to the action of digitalis. If he would do so, the doubts which otherwise may beset his mind in the exigencies of practice will not often embarrass him. To remember Rosenstein's axiom will serve him well many a time and oft, when in doubt as to what to do—to give or withhold digitalis. Say it is a case of aortic regurgitation: if the arterial system is well filled then digitalis is contra-indicated; but if the wall of the heart be yielding in the later stages, then surely it ought to be given. In almost all cases of mitral lesion digitalis is indicated. But there is another condition in which digitalis is sometimes given with injurious effects which contrast with these conditions. The hypertrophied gouty heart often palpitates when there is arteriole spasm, and the larger arteries are tense and full of blood. The resistance offered by this full arterial system to the onward flow of the blood at the cardiac systole is such that the ventricle palpitates in its efforts to contract effectually. Such a condition is commonly seen in the "chronic Bright's disease without albuminuria;" so well described by Dr. Mahomed. Here digitalis does no good, but harm; for the arteries are already full to the risk of apoplexy. Indeed this last accident has followed the administration of digitalis under these circumstances. The full artery, then, is a contra-indication, just as much as an empty artery is an indication for the administration of digitalis, whether the heart be diseased or not.

Digitalis is a diuretic, says another: "Whenever the bulk of urine rises then I know digitalis is doing good." Certainly, if a horse be yoked to a cart previously stationary, and after that the cart be seen moving away, it is a pretty accurate inference that the horse is drawing the cart. The bulk of urine, as Traube taught, is the index of arterial fullness. When the arteries are filled by the action of digitalis the bulk of urine is increased. The rise in the bulk of urine tells in the most unmistakable manner that the action of the drug is filling the arteries. In dropsy, when the bulk of urine is low and the specific gravity is high, then digitalis is pre-eminently useful. When albuminuria is present from venous engorgement in heart failure, the administration of digitalis will often be followed by its disappearance. As the arteries are filled the veins are depleted; the albumen, which tells of venous congestion, disappears as this state of the veins is relieved; as the arteries are filled the bulk of urine rises.

The great matter for the practitioner to remember about digitalis is, that it increases the energy of the ventricular contractions; and that the clinical indication for its administration is an empty artery. With such view before his mental vision the practitioner will rarely experience any difficulty in deciding when to give, or when to withhold the potent digitalis—potent for good or harm according to the circumstances under which it is prescribed.

In cases of cerebral anemia digitalis may often be prescribed with advantage when it is desirable to raise the blood-pressure within the arteries.

BORACIC ACID FOR RINGWORM.

℞ Acid. boracic., gr. xx;
Alcoholis, f℥ j;
Ætheris, f℥ j. M.

Sig.—To be forcibly rubbed into the affected parts of the scalp three times daily with a rag or moderately stiff brush. The head also to be thoroughly washed each morning with soap and hot water.—CAVAFY.

CARBOLIZED IODOFORM.

The following formula is given by C. Sherk (*Berliner Klin. Wochenschrift*) as a great improvement over plain iodoform:

℞ Iodoform., 10 gr.;
Acid. carbolic., .05 gr.;
Ol. menth. pip., 2 drops.

The acid is to be rubbed up with the iodoform, and the peppermint oil added subsequently. The disagreeable odor of the drug is completely covered, and it is not again developed, even at an elevated temperature.

THE DOCTRINE OF DESQUAMATION.

There is hardly any disease in regard to which diagnosis is at once so difficult and important as scarlet fever. All authors agree in saying that almost every prominent symptom of it may be wanting. All the symptoms of the earlier stages may either be absent or may be overlooked —sickness, sore-throat and rash. And even the temperature, judged by one or two observations, may be below 100°. All authorities describe, and all practitioners are familiar with, cases in which no suspicion of diseases exists until the occurrence of desquamation, in circumstances which leave no doubt that it is only a part of scarlet fever. But surely desquamation itself is also a most variable process, so variable as to excuse a good deal of opinion on it, which undoubtedly exists. It may be almost entirely absent, it may occur out of proportion to the amount of rash, it may be long delayed or it may extend over a very variable period. The recent correspondence was based on the case of a boy at a large public school near London, whose scarlet fever was detected only by close observation, the amount of rash being small, and the whole attack unusually light. The medical officer of the school gave his sanction for the boy returning home three weeks after the attack, who never had any sign of desquamation. The father having other children at home during the Christmas holidays who had not had scarlatina, naturally felt afraid, and wisely (we presume with due precautions for the boy and others) removed him to an infirmary specially intended for such cases. Between two and three weeks later, and six weeks from the commencement of the attack when the boy should have returned to school, he he was found by a practitioner to be peeling. The medical man of the school considered the peeling to be unconnected with the attack which he had at school, and to be due to eczema. The father of the boy associated it with the attack that had been so well diagnosed at school, and saw in it a justification of his caution in not allowing his son to return home. The majority of authorities will be disposed to agree with Dr. David Page, that patients recovering from scarlet fever may have their desquamation much deferred, and that certainly they are not desirable as members of society for at least eight weeks. This is very hard, especially in cases where the disease is slight, where there is no sense of illness, and but slight or no appearance of desquamation, but it is sound doctrine. The precautions may be excessive, but the the case is one for great caution. Still it must be admitted that even among authorities there has been a variety—not to say looseness—of teaching which goes far to explain, especially in connection with the acknowledged variations in the process, the view taken by the medical officer of the school. Let us notice only a few that are at hand. Trousseau says : " Desquamation in scarlatina is not very well understood by the majority of physicians." He instances a case in which, though at the seventy-second day, it was still going on. Trousseau would have been apt to regard even Hebra as unsound, for Hebra speaks of desquamation as ending at the " end of the third week." Dr. J. Lewis Smith, a very good observer, of New York, speaks of desquamation as succeeding the disappearance of the eruption and occupying " several days." Mr. Malcolm Morris says it begins in the latter part of the second week, but may commence as the rash fades, or not until the end of the sixth week. Dr. Bristowe says the period of desquamation is of various duration. " It is sometimes completed in one or two days, not unfrequently extends over a week or two, and occasionally is prolonged for several weeks." Whether difference of opinion is sound excuse for difference in practice, the variety in the process itself and the occasional instances in which it is deferred indicate the safety of a rule of exclusion of at least six weeks, and if possible eight. Parents and patients will often rebel against this hard doctrine, but, considering the gravity of the disease, it is a safe one for medical men to hold. A correspondent reminds us that all desquamation is not scarlatinous. He described one case in which it seemed to result from the administration of turpentine for hematuria. This suggestion is one to be remembered, when sanitary law and professional duty in connection with desquamation are often both delicate and difficult.—*Lancet.*

ECZEMA OF THE GENITALS.

Devergie recommends :

℞ Alumin., 10–20 grammes ;
Aquæ, 500 "

Or the following :

℞ Hydrarg. chlorid. corrosiv., 10–20 cgrm. ;
Aquæ destillat., 500 grammes,

in solution, applied three times a day.—*La France Médicale.*

IODIDE OF POTASSIUM IN FRONTAL HEADACHE.

Dr. Haley states, in the *Australian Medical Journal*, that for some years past he has found minimum doses of iodide of potassium of great service in frontal headache. A heavy, dull headache, situated over the brow, and accompanied by languor, chilliness, and a feeling of general discomfort, with distaste for food, which sometimes approaches to nausea, can be completely removed by a two-grain dose dissolved in half a wine glass of water, and this is quietly sipped, the whole quantity being taken in about ten minutes. In many cases the effect of these small doses has been simply wonderful. A person who, a quarter of an hour before, was feeling most miserable and refused all food, wishing only for quietness, would now take a good meal and resume his wonted cheerfulness. The rapidity with which the iodide acts in these cases constitutes its great advantage. —*Boston Journal of Chemistry.*

ON THE CURABILITY OF ACUTE TUBERCULOSIS.

By Octavius Sturges, M.D., Physician to Westminster Hospital.

The case I propose bringing forward involves a curious problem of practical medicine in the nature of a dilemma. Acute tuberculosis is represented to us from the anatomical point of view as a disease which is uniformly fatal. At the bedside, however, we meet with examples, undistinguishable from acute tuberculosis, which nevertheless recover. Are we to say of these that our diagnosis has been in error, or that the statement of the uniform fatality of acute tuberculosis is not without exception? Is it more probable that the diagnosis is wrong or the treatment curative? If the diagnosis be an error how may such errors be avoided in future? If it be the treatment that makes all the difference, in what manner is such treatment to be employed, what is the evidence of its efficacy, and to what stage of the disease does it apply? I need not say that questions like these are of the highest practical interest. They are so from the pathological side, owing to the very intimate likeness between acute tuberculosis and enteric fever. They are so still more from the treatment side, owing to the assertion of some that the hypophosphites of lime and soda are directly curative of acute tuberculosis.

Now the case shortly summarised from the notes of Mr. Butler, clinical clerk, is as follows:—

George C——, aged sixteen, a well nourished youth, but of tubercular aspect (his mother being consumptive, and two of his maternal aunts having died of acute phthisis), was admitted on May 31st. Just a month before, he had been standing at a pier-head when heated from fast running, and in that way, as he supposed, caught cold. Shivering came on the next day, and he kept his bed for a fortnight, being "very ill;" the chief symptoms were coughing, with much expectoration, repeated nose-bleeding, and profuse sweating, especially at night. At the end of the fortnight the boy improved sufficiently to get up. He had lost much flesh during his illness, and his cough and sweating continued. As soon as he could bear the journey he came to hospital, where he was admitted at the date mentioned. When first seen the patient's aspect and pose indicated extreme depression, and there was that blush on his cheeks which, taken together with his lustrous eyes and long lashes, would suggest to the observer, other things being excluded, acute tuberculosis. The temperature was 104.2° on the first night (for the next eight days the highest daily reading reached or exceeded 104°). The tongue was furred; bowels confined. Pulse about 100. A very careful examination of the lungs discovered large bronchi merely, no dullness; no small bubbling; no physical evidence of any kind, except of bronchial flux; the sputum bronchial and uncolored. Such was his condition on admission, and so it continued for fourteen days; a condition, namely, of extreme depression, temperature ranging daily between 102° and 104.6°; absolute loss of appetite; sleeplessness, night-sweating, and wearing cough, with mucous expectoration, sometimes blood-streaked; the bowels being confined (except for one occasion, when they acted copiously after medicine), and the pulse seldom much exceeding 100. But what was the most striking and the most suggestive, or, as it seemed, probative of the diagnosis of tuberculosis, was that with the progress of time the patient rapidly wasted. That and the profuse sweating and prostration were the main features of the case, yet still with no more positive physical signs than those mentioned. Between the sixth and the twelfth days from admission the prostration was so extreme that it was only with great difficulty he could be raised, or indeed moved, for the purpose of examination. Yet, with an eye to possibilities, attention was continuously directed to the lungs, and it may be said positively that although bronchitis persisted, and some small bubbling was audible for a time at the left base, there was never any sign of consolidation or pneumonia. Howbeit, on the fourteenth day from admission (which would be six weeks from his first seizure and a month from the time when he had a temporary mend) signs of improvement were observed in that the night temperature fell from 104° to 103°, and the bodily weakness was less. From that day to the nineteenth a continuous progress began to open out hope of ultimate recovery. By the twenty-second day (making sixty-two days from the commencement of illness) that hope became almost assurance. The temperature had gradually fallen, and was now hardly above normal, the wasting and sweating had ceased; and, above all, the extreme bodily prostration had disappeared. With this marked improvement the catarrhal sounds within the lungs underwent but little change, and on the twenty-eighth day, when he was up and convalescent, some bubbling bronchus was audible at both bases. During the extremity of his illness it was impossible to take his weight; the only measure of the loss of flesh, therefore, is quite inadequate to express the fact. Before his illness he weighed 7st. 10lb.; on the twenty-seventh day after admission, and when approaching convalescence, he weighed 6st. 8½ lb.; a week later he had gained exactly 4lb. As regards treatment, all that it is necessary to say now is that on the 7th of June, when near his worst, and seven days before he began to mend, the boy was given ten grains of hypophosphite of soda every four hours, and this was continued for the rest of the acute illness.

In the main features of this remarkable case there are, as I think, to be found some important practical lessons—facts which are too little recognized and probabilities which are too easily set aside. Take first the fact itself. Better than all theories or precarious deductions is the knowledge which this case gives that in a tubercular subject

a pyrexia of indefinite duration, which entails such wasting as almost to reach the point of emaciation, and is attended by profuse night sweats and extreme prostration, is a condition which may and which does recover. Let it be enteric fever or acute tuberculosis, or what you will, this combination of symptoms, grave as it is, as a rule fatal as it is, is not absolutely hopeless. That made certain, many other questions press for consideration. What are the probabilities in regard to diagnosis, and how are these affected by the fact of recovery? What are the particular circumstances of these recovering cases as to treatment? What is the likelihood that we may ever succeed in making recovery more common?

It has been said—the expression indeed is attributed to a very sagacious physician of our day—whenever you have to deal with pyrexia of anomalous character, the other symptoms not fitting in with any recognized pattern of disease, always put to yourself this question: "Have we here to deal with enteric fever?" But this admirable hint, so serviceable to prevent grievous errors, is not to be twisted from its real meaning. Some would put it not as a question to be deliberately decided yea or nay, but as an affirmation. Here is a pyrexia with anomalous symptoms. I cannot fit it to anything in particular; I will call it enteric fever, an affection which has so many forms that it may be fitted to anything.

Only just now, while I am speaking, we have an illustration at hand of the errors that may be committed and the valuable clinical knowledge that may be overlooked by such conduct as this. A patient in Burdett ward, with symptoms corresponding in many respects—in aspect, in temperature, in nervous prostration, in the color and consistence of the motions—with enteric fever gets, too easily, credited with that disease. And if by any accident she had passed from our notice in the second or the third week of illness, her precise condition would take its place in our memory as a contribution toward the full conception of the many ill-defined modes of enteric fever. But it so happened at the end of the fourth week she died, exhibiting post mortem, not enteric fever, or any trace of it, but the most characteristic and extensive ulcerative endocarditis.

In the case before us, however, there is not the same excuse as in the other—nay, the same necessity, we may almost say—for making use of enteric fever to eke out a doubtful diagnosis. Except for febrility, this youth had nothing of enteric fever about him, either in his symptoms or in their duration. We put the question as we are advised, and we answer it without hesitation in the negative. Be it what it may, the disease we have before us is not enteric fever. Proceeding, as is the custom in such cases, upon the principle of exclusion, that alternative, at all events, may be dismissed. But may we not go further, and say of this boy not only that his illness was *not* enteric fever, but that it *was* acute tuberculosis? Remember that while acute tuberculosis is very commonly mistaken for typhoid fever, the converse of this is not true. We have here the proper tubercular symptoms clearly marked out from the rest, symptoms which have been met with repeatedly in connexion with grey miliary granulations. There seems hardly room for mistake. Only when we are confidently expecting the boy's death, he disappoints that expectation and recovers.

Is, then, the fact of recovery to negative the diagnosis of acute tuberculosis? Of the actual deposit of tubercle it may indeed. No one, I suppose, believes that these little bodies may be thickly strewn throughout the lung in the way that we find them and the patient nevertheless recover. But there is much reason for believing that we may approach—who shall say how near?—to that pathological event and then stop short; just within the boundary, it may be, which separates extreme peril of death from the absolute certainty of it.

Did time serve I could adduce much evidence to prove that the condition we recognize clinically as acute tuberculosis is not necessarily fatal, whether occurring in youth and tending toward the lung (yet with no admixture of phthisis in the sense of lung destruction), or occurring in childhood and tending toward the pia mater. We get the very same group of symptoms in cases that are exceptional in that they recover, as in cases that form the rule in that they die; and, moreover, the earlier in life the observation is made—the nearer we get to that period when tuberculosis is seen, so to speak, in perfection—the more does it appear that individuals may exhibit all the symptoms, not only premonitory of tuberculosis, but which are commonly believed to announce it, and then when the diagnosis is complete, and the prognosis seems certain, turn round and recover.

But I would ask you to look at the matter upon a somewhat broader ground. The recovery from tuberculosis, meaning by that term the clinical phenomena commonly supposed to be indicative of the deposition of miliary tubercle, so far from being rare, is a matter of frequent experience. What is rare, although less rare, I believe, than seems owing in great measure to the habitual invocation of enteric fever, is its recovery when it has passed a certain stage. We all know and teach that children of a particular conformation, whose scalps sweat at night, who grind their teeth and but half close their eyes in sleep, and so forth, are especially prone to tubercle and to death by meningitis. We advise that particular care should be taken to preserve such children from cold, from foul dwellings, from over mental application; and we insist that the first signs of pyrexia or sickness, signs insignificant with other children, need immediate attention with them. Yet, in spite of all our precautions, or for the want of them, such children get pyrexia more often than others. A certain proportion—the most tubercular, if we may so speak—will inevitably

die; the rest will die or not, according to the care that is taken of them, the food they get, and the place where they live. But hardly any, until the time of their special liability is over, will escape attacks in which they will be pyrexic and waste, and show symptoms, cerebral and other, which are often absolutely indistinguishable from those that usher in a fatal meningitis.

Still more striking is the case of young adults who are tubercular. With these we know that the chief danger is not for the brain, but for the lungs; and we have strong hope that if we can tide them over the period of youth later manhood will give them comparative security. But how is it with them during this time of jeopardy? Much more than with the little children, it is apparent that they will live or not, according as their circumstances are ordered; that their life depends, that is to say, upon the conditions of living being made the easiest for them. A young man of tubercular tendencies (I am quoting from the fact) wastes, and sweats, and coughs, but with nothing discoverable in his chest beyond bronchial catarrh. Soon he is too weak to leave his room. He is advised to take a sea voyage, and to remain for a year or more in New Zealand. There he loses his cough and his weakness, puts on flesh, takes to an active out-door life as a sheep farmer, and presently, as is but natural, pining for his home and his old profession, and believing himself perfectly recovered, he returns to England. Again there are the wasting, the cough, and the depression; and this time the symptoms are so threatening that there is grave doubt whether he can be got on board ship, or whether in his extreme state a long journey is justifiable. But once more away from the country which is not liveable for him the threatening symptoms disappear, and his health returns.

Who then, I ask, will venture to say or to write in a book at what particular stage in the tubercular fever (so to call it) all expectation of recovery is cut off; or rather let me say, not so much expectation as possibility? It would of course be a grotesque misrepresentation of nature to pretend that such a case as ours in Burdett ward is not highly exceptional; or that with such symptoms any other result than death is to be looked for. But who is to draw the line between recoverability and irrecoverability? who is to say what particular phase or event in the clinical history represents the actual development of tubercle and seals the doom of the patient? We have ample justification, I contend, in laying down as true this proposition, in youth as well as in childhood threatened tuberculosis recovers. We can tell when such recovery is to be looked for; we can tell when it is highly improbable; we can hardly tell, certainly we cannot tell precisely, the point at which it becomes absolutely impossible.

But there is another point for consideration. Tubercular individuals, children at all events, will present the clinical symptoms of tubercular meningitis, and die in the usual way, but by post mortem neither tubercle nor inflammatory exudation will be discovered. We have to reckon, then, with the following facts, and to make out of them the best hypothesis we can. There is a certain set of symptoms by means of which acute tuberculosis is commonly recognised at the bedside. Such symptoms commonly end fatally, and after death grey granulations are found in certain situations. But to this rule there are two kinds of exceptions. One where the symptoms in question do not end fatally; the other where, although ending fatally, no trace of the grey granulations is to be found.

What, then, is the hypothesis—I mean the working provisional hypothesis, which best fits this state of facts? I think it is this: Acute tuberculosis regarded from the clinical point of view is to be distinguished from the actual deposition of tubercle regarded as an anatomical fact. The early symptoms of acute tuberculosis are those which precede the actual development of the grey granulations. This latter event, analogous in some respects to the eruption of a specific fever, is preceded by certain phenomena extending over a variable period of time, during which restitution is still possible. And while, on the other hand, the deposition of tubercle marks the termination of hope, on the other the stress of the premonitory fever which precedes that occurrence may of itself suffice to produce death.

But here the therapeutist steps in, and clearly there is a place for him. If his experience be large, it will furnish him with examples which will easily push aside the assertion that the acute tuberculosis which seems to recover is in fact not what it seems, but enteric fever, or something else. He has, then, only to appeal to the dogma that acute tuberculosis, pursuing its natural course, is necessarily fatal in order to reach the position he desires—the doctrine, namely, that the cure of this disease is accomplished through the agency of the hypophosphites of lime and soda. My own practice with reference to such drugs is this. In the belief that they are at least harmless, that they are commended for a class of affections very bare of remedies, and where some medicinal treatment or other is reasonably expected on behalf of those who are acutely and progressively ill. I have uniformly given the hypophosphites in every case of acute phthisis or acute pulmonary tuberculosis that has been under my care for many years. Without being at all struck with the effects of a remedy very highly commended in some quarters, I can certainly quote instances where the hypophosphites have been so far injurious that patients have improved on there being discontinued. In the present case ten grains of the hypophosphite of soda were given every four hours, commencing a week after the patient's admission. His worst and weakest time, you will remember, was the week succeeding. How far this is consistent with any curative power

of the hypophosphites I leave you to determine. For myself, I believe that when cases like this one of ours are more widely recognised; when the fact of recovery is admitted not only by those who profess to have brought it about, but by others as well, who are prepared to note all the circumstances under which it occurs—when that time comes the curability of tuberculosis will be found to depend not upon the hypophosphites or any other preparation of pharmacy, but upon the employment of those agencies for its cure which are suggested by the causes that provoke it. Is there no therapeutical teaching in the fact that the tuberculous children of the poor develop tuberculosis as the rabbits do by living in impure air and damp underground cellars; or the fact that a youth of tuberculous family will escape the fate of his brothers and sisters, and the fate that over and over again has threatened himself, by removing to some better country?

Those who are the most firmly persuaded of the incurability of acute tuberculosis will not deny that there are certain well-recognised signs by means of which the tuberculous are distinguished from the rest of the community; they will not deny that there are certain localities and certain modes of living the least hostile, each for each, to the lives of such persons, and that by having recourse to such places and plans the life that is repeatedly menaced during childhood and youth may reach a healthy and secure manhood. But why need we stop here? I firmly believe that the time will come when what everybody admits will no longer be applied partially, but carried out to its full conclusion; and when it comes patients suffering like this boy whose case we have been discussing will be removed, wherever feasible, from their town surroundings, and placed without delay or fatigue in the best possible conditions for recovery upon some hill or mountain top, or, at all events, in the pure air of the country.—*Lancet.*

CALCIUM SULPHIDE IN SUPPURATION.

Dr. A. H. Smith (*New York Medical Journal*, June, 1882), after careful analysis of several cases, claims that he is warranted in concluding that in many cases of suppuration an appreciable and often marked benefit is derived from the use of calcium sulphide. At the same time the action of the drug is not perfectly uniform, and in apparently favorable cases it may fail entirely. The drug is somewhat prone to irritate the stomach, which affords an indication for small doses frequently repeated. One tenth of a grain every two hours will generally, in acute cases, secure the full therapeutic effect of the drug, but large doses may sometimes be required, and some patients bear well a grain three or four times a day. Even in small doses the drug may occasionally produce headache, and the patient be more or less annoyed by eructations of hydrogen sulphide.—*Chicago Medical Review.*

CONSTIPATION.

When constipation is due to torpor of the muscular layer of the intestine, combined with defective secretion of the mucous membrane, Dr. Bartholow uses either of these formulæ: ℞. Tr. nucis vomicæ; tr. belladonnæ; tr. physostigmæ aa. f. 3 ij. M. Sig. Thirty drops in water, morning and evening. Or, ℞. Ex. physostigmæ; ex. belladonnæ; ex. nucis vomicæ, aa. gr. v. M. Et. ft. in. pil. No. x. Sig. One pill at bedtime.—*Medical Gazette.*

CATARRHAL CONDITIONS—INSUFFLATION OF MEDICATED POWDERS.

According to Dr. D. H. Goodwillie, New York, the following powders have been found most useful:

Number 1.—℞. Benzoicii, 3 j.; morphiæ mur. gr. vi.; bismuthi subnitrat; potassi nitrat.; aa ℥ ss.

Valuable for its sedative action. To be used in hyperæmic conditions, with pain. In the beginning of an attack of rhinitis coat the mucous surface with it.

Number 2.—℞. Aluminis, 3 j.; acaciæ; bismuthi subnitrat.; potassi nitrat., aa 3 iv.

Useful where a strong astringent is indicated. In case of hæmorrhage from the nose, remove all the clot, and immediately blow in this powder abundantly until the bleeding ceases.

Number 3.—℞. Iodoformi; camphoræ, aa 3 j.; bismuthi subnitrat; potassii nitrat., aa ℥ jss.

A good antiseptic. To be used where the discharges are fetid, or where ulceration is present, or an excessive amount of granulations. The camphor masks the odor of the iodoform. These powders, when impalpable, and with the therapeutic integrity of these drugs preserved, can be more effectually applied to the nasal passage than spray, and their good effect is certainly more prolonged. For the general practitioner they are vastly more convenient than sprays.—*Arch. Med.*—*The Southern Clinic.*

THE EFFECTS OF THREAD AND ROUND WORMS UPON CHILDREN.

M. Archambault recently made some clinical remarks at the Hospital des Infants Malades, Paris, on the effects produced by the *Oxyuris vermicularis* and the *Ascaris lumbricoides* in young children. He said one of the smallest and most curious worms, the presence of which causes so much trouble to young children, is undoubtedly in the so-called "thread-worm," the *Oxyuris vermicularis*. This helminthe has its abode in the lowest part of the rectum, just within the anus. It is the cause of a number of troubles, and of very severe itching, which is chiefly nocturnal, and therefore often characteristic of the presence of this

particular worm. The itching is sometimes so severe as to make children cry ; it prevents sleep, and so gives rise to extreme irritation, which may bring on convulsions. This worm is also met with occasionally in adults, and has, by the intolerable itching to which it gives rise, brought on a veritable condition of hypochondriacism. Another effect, in certain cases, is an inflammation of the rectal mucous membrane, accompanied with tenesmus and muco-sanguinolent stools. In female children the worms may find their way into the vagina, and so bring on a vulvitis, more or less intense, with secondary effects which are most undesirable. Thus, although the presence of these minute worms is not in itself dangerous, yet the secondary consequences may be really grave. Their treatment is as follows : Administer an enema, for five or six consecutive evenings, of lime-water ; if this is not sufficient, add—as Dr. West advises—a little perchloride of iron, and the worms will be almost certainly destroyed. Or a mercurial suppository may be tried if the enemeta do not succeed. It is very desirable that the enema be properly administered, and in sufficient quantity ; it should pass up as far as, or even beyond, the sigmoid flexure, so as to dislodge any worms which may have crept up beyond their usual site. As regards the lumbrici, it may be said that they are harmless (*assez innocents*) ; it is only when very numerous that their presence becomes dangerous. M. Archambault was once called to see some children who had just arrived from Brazil, and who had been taken ill with convulsions, vomiting, and diarrhœa. Finding in the stools a number of these round worms, he ordered calomel and santonin. An immense number of worms was passed—" it would be no exaggeration to say that the three children in three days passed a hatful of these helminthes." There are so many other anthelmintics than those just mentioned, that the physician's chief difficulty is the *embarras du choix.—Medical Times and Gazette.*

URTICARIA.

H J., 18 years. Here is a young lady who comes to us suffering from " the hives." Here, upon the forearms, you see these large, red blotches, each with a pale or whitish centre, no regularity as to distribution, but lying close together on some parts of the limb, while upon the hand, considerably removed from the others, are more patches. They are quite prominent, and give rise to a most exasperating sensation of burning and itching. Even now you see she cannot refrain from scratching the parts. Both arms and hands, and the face as well as neck, are involved. Doubtless the body and lower limbs share the affection in turn. There is never any difficulty in recognizing the disease, the wheals are so characteristic. In no other disease do we find wheals appearing suddenly, and, after remaining a varying time, disappearing as rapidly and mysteriously as they came. It is a most common difficulty, and the diagnosis is easily made out. But what causes it is not always so easy to ascertain. A case of urticaria or nettle rash, in which the exciting cause is unknown, is one of the most stubborn and unsatisfactory of all, and the doctor to whose lot it falls is apt to become disgusted with the study of dermatology. The exciting causes of urticaria are divisible into three heads : local irritants, a polluted circulation, and reflex irritation. Without going deeper into the subject, let me say that the first two causes are easily disposed of, and it now remains to be seen how reflex irritation is responsible. The patient yesterday morning indulged in fish for breakfast, and in the course of the afternoon felt a burning and smarting upon various parts of the body. It was not severe, however, till night, when she got warm in bed, at which time it became almost unbearable. Once or twice before fish has had the same effect upon her, but not for several years. She is of a nervous temperament, evidently, and this fact renders it all the more easy for the disease to manifest itself. My assistant tells me that just before coming into the room there was no sign of wheals, yet upon her entrance, I was able to show you some very fine specimens of them. The disease is, I feel convinced, a neurosis, not alone in the case before us, but demonstrably so in every case. The divisions I gave you a few moments ago are made for the sake of convenience only, and if the first two so-called heads be eliminated, I think that reflex action can be clearly shown to be the cause of the cutaneous phenomena in every case.

The treatment in the present case shall consist of three compound cathartic pills. Considerable constipation is present, and as no stool has been had since the eating of the fish, it will have the effect of removing the remnants of it and clearing out the alimentary canal. Locally, a lotion, as follows :

℞ Ammoniæ carbonatis, ʒ ss.
Plumbi acetatis, ʒ j.
Glycerinæ, f ʒ j.
Aquæ rosæ, f ʒ v.

M. Sig. Use as a wash, several times daily.

Without doubt our patient will obtain relief by these measures.—Clinic of Dr. F. Le Sieure Weir, reported in *Medical and Surgical Reporter.*

ATROPINE IN THE TREATMENT OF EPILEPSY.

Dr. David advises the treatment of epilepsy by the simultaneous employment of atropine and the bromides of potassium and ammonium. For a period of six months, he orders twenty grains of the bromide of ammonium—thrice daily. At the same time the patient is instructed to take a granule of one milligramme of sulphate of atropine

morning and evening. At the end of six months the following pills are prescribed:

℞	Valerianate of zinc,	4 centigr.
	Extract of belladonna,	6 milligr.
	Arsenious acid,	2 milligr.
	Extract of gentian,	q. s.

Two of these pills are taken daily during twelve months. Should the faintest symptom of the threatened occurrence of the epilepsy appear the treatment must be kept up for yet another twelve months.—*Glasgow Medical Journal.*

TREATMENT OF MEMBRANOUS DYSMENORRHŒA.

Mr. Orsby (New York *Med. Record*) gives five cases of painful menstruation, accompanied by the shedding of flakes of membrane, successfully treated with calomel in combination with opium. His formula is as follows:

℞	Ext. opii,	gr. vi,
	H drarg. chlo. mit.,	gr. xij.

Divide in twelve pills, one to be given every four hours till the gums are affected.

He regards the known efficacy of mercury in all forms of hyperplasia, acute and chronic, as justifying *a priori* its exhibition in a complaint in which the hyperplastic element is recognized by pathologists, and his practice has completely confirmed this view. Calomel has been the only salt of mercury tried, as it produces its effects rapidly, with little irritation.

PUERPERAL FEVER.

In the *Edinburgh Medical Journal* for October is contained an interesting and short paper by Mr. John Lowe, on "Puerperal Fever: its Treatment and Prevention," in which occurs the following judicious expression of views in regard to teatment:

"I am strongly of opinion that by early and repeated aseptic intra-uterine injections, a rapidly acting cholagogue, washing out the bladder, if necessary, with some aseptic solution, and the timely and liberal use of stimulants, will avert death in many instances. It is no use giving the nurse instructions to wash out the uterus; we must do so ourselves by means of a long tube in the uterine cavity tself. Ammonia and brandy I regard as the meidicines for the disease; indeed, when food is refused, brandy is not only most grateful to the patient, but is peculiarly well adapted to supply the place of ordinary food, and no amount of fever or other symptom contraindicates stimulation when changes so destructive to the vital fluids and tissues of the body are in terribly rapid progress. To give aconite or veratrum viride in such cases is, in my opinion, as unscientific as it is useless: and yet these remedies have been vaunted and are actually used by men of undoubted ability and eminence. To get rid of a fermentative poison from the blood, we must adopt some such practice as I have indicated, and not stop to theorize about the physics of the circulation. We must, in other words, support vitality and eradicate the poison. That salicylates and sulphocarbolates taken internally do not rectify the turbid urine in puerperal fever I am convinced from experience: and I would strongly urge that all depressant remedies are both hurtful and dangerous.

The use of carbolic spray, and irrigation of the uterus and vagina with carbolic solution, immediately after labor, are considered important means for the prevention of puerperal septic poisoning.

A SIMPLE MEANS OF CHECKING PULMONARY HEMORRHAGE WITH SHAWL STRAPS.

Dr. H. Holbrook Curtis gives, in the *New York Medical Record*, a novel way of arresting pulmonary hemorrhage. Called in a case of emergency, Dr. Curtis purchased a pair of ordinary shawl-straps punched with holes a quarter of an inch apart, and braided three strands of drainage-tubing, making two cords of as many feet long. He laid a folded napkin over each femoral vein just below the fold of the groin, and adjusted the straps above the thighs as high up as possible so that the buckles would be over the napkins. The straps were tightened enough to stop the venous return without interfering with the arterial supply of the extremities. Then the arms near the shoulders were bound by the rubber tubing. The hemorrhage was checked almost immediately, and in about five minutes the straps and tubing were loosened. This was no sooner accomplished than the patient complained of a great shock to "the sore place," and the bleeding recommenced. The same procedure checked it as before. In about five minutes, the extremities becoming markedly cyanotic, the straps were loosened, a hole at a time, when no hemorrhage recurred The shallow and difficult respiration was greatly relieved by keeping an arm and the opposite leg strapped. As soon as a member became cyanotic the strap was changed to the opposite side.

QUINIA IN EXCESSIVE SWEATING.

Dr. T. H. Currie, Lebanon, N.H., says, in *Michigan Med. News:*

For over thirty years I have used the following prescription, without a single failure, in sweats from whatever cause:

Alcohol,	O j,
Sulphate of quinine,	3 j. M.

Wet a small sponge with it and bathe the body

and limbs, a small surface at a time, care being taken not to expose the body to a draught of air in doing it. In one case a neighboring physician was poisoned while dressing a mortified finger. He suffered untold misery, and was drenched with perspiration for a number of days, and his life despaired of. When I saw him I ordered him to be bathed immediately in the above solution, and that this be repeated once in two hours. The third application stopped all perspiration, and convalescence began at once.—*Quinologist.*

THE RATIONAL TREATMENT OF MENORRHAGIA.

Dr. Arthur W. Edis read a paper on this subject, in the Section of Obstetric Medicine, at the last meeting of the British Medical Association (*Brit. Med. Jour.*), from which we extract the following. In the term *menorrhagia* he includes all cases of uterine hemorrhage occurring in the practice of the gynecologist, whether as profuse or prolonged menstruation, or as a loss of blood from the uterus other than that which occurs at or about the time of parturition. Sometimes it acts as a safety valve, a smart attack of hemorrhage often serving to avert a still more serious effusion from the ovary, or its surrounding plexus into the peritoneal cavity, or even preventing an attack of apoplexy at the so-called climacteric period. Diagnosis is the most important element of treatment, for menorrhagia is merely a symptom, not a disease. The age of the patient will often give us a clue to the cause; cardiac complications from rheumatic fever, hæmatocele, ovarian irritation, constipation, etc., in the young; polypi, fibroids, retroflexion, retained products of conception, in the middle-aged; climacteric irregularities, cancer in its various forms, hepatic disorders etc., between the ages of forty and fifty. In young plethoric girls, when menstruation is profuse, instead of iron, which will increase the trouble, regulate the diet, limit animal food and use bromides, to lessen ovarian irritation, along with an occasional saline aperient. In anæmic patients, when iron is used it should be combined with salines in moderate doses, as a chalybeate water. In single patients, where menorrhagia is marked, and persists in spite of general treatment, an examination should be insisted upon. When the slightest irregularity in the appearance of the catamenia leads to the suggestion of the possibility of pregnancy, any attack of menorrhagia, and especially if it recur, should be regarded as a threatened miscarriage and treated accordingly. When uterine hemorrhage is severe, whether from imperfect expulsion of an early ovum, intra-uterine polypus, submucous fibroid tumor, or other similar conditions, in place of attempting to restrain the flow by linen or cotton packed in the vagina, a far more rational and scientific method will be to insert a sponge tent into the cervix uteri. This will check the hemorrhage and dilate the cervix to facilitate subsequent examination. Hæmatocele is a requently overlooked cause of menorrhagia, as is also extra-uterine gestation at an early stage.

If hemorrhage be severe and continuous, and the probability of extra-uterine gestation exist, the patient's life being evidently jeopardized by the amount of effused blood withdrawn from the circulatory system, the only hope of saving the patient is to make an exploratory abdominal incision, secure, if possible, the bleeding vessel, or remove the ruptured cyst, as may be found advisable.

Retroflexion, accompanied by congestion of the uterus, in patients who have borne children, is not an unfrequent cause of menorrhagia. A correct diagnosis is here essential before treatment is likely to prove of service. The two conditions are often so intimately associated that, unless both of them be dealt with simultaneously, permanent relief is not obtained. The misplacement serves to keep up the congestion, and the latter equally tends to prevent the uterus from assuming its normal position. Puncturing, scarification, or the application of leeches, followed up by hot water injection and glycerine plugs, may first be tried, to lessen the congestion, a ring pessary, or other appropriate support, being then inserted, to keep the uterus in its normal position, and thus lessen the tendency to a recurrence of the congestion.

The management of hemorrhage, due to large intramural or submucoid fibroids, is one often of much difficulty. Where ergot, bromides, cannabis indica, gallic acid, digitalis, and other similar remedies, fail to arrest the flow, and the patient's health is markedly affected by the repeated or severe losses, the question of spaying, division of the cervix uteri, or removal either of the fibroid or of the entire uterus, should certainly be entertained. The results obtained during the last few years by operative interference in the cases are most encouraging, and the operation well deserves more extended trial. No patient, the subject of uterine fibroid, where the symptoms are so severe as to impair her usefulness or threaten her life, should be allowed to die unrelieved, without having the option of operative interference.

Vascular disturbances at the climacteric, or change of life, as it is popularly spoken of, should never be treated lightly, but always carefully investigated.

In some instances, regulation of the bowels, restriction as to diet, especially the amount of alcohol, and a proper amount of out-door exercise, will be all that is requisite. In others, the hemorrhage persists, in spite of all treatment, and, on a careful investigation, epithelioma of the cervix uteri is at once detected, probably too late for any operative interference. In no case should hemorrhage at this period be diagnosed as change of life, without a careful examination being made and a correct diagnosis formed.

In cases of epithelioma of the cervix, when hemorrhage is a marked symptom, in place of giving

ergot or iron and plugging the vagina, it will be much more rational to remove as much of the diseased mass as may be deemed prudent, with the écraseur or curette, or both combined, and then to apply either the liquor ferri perchloridi fortior, the persulphate of iron or the actual cautery.

TREATMENT OF VARICOSE ULCERS OF THE LEG BY LEVIGATED SUB-NITRATE OF BISMUTH.

It was not my intention to make this report to-day, wishing before doing so to carefully record the result of a large number of cases treated by this method.

Having already treated *twenty* cases *successfully*, with the sub-nitrate of bismuth, I have only carefully written out the last. This is, however, a typical and conclusive case. I think this case will show conclusively the efficacy of this remedy in certain ulcers, especially in those of varicose origin.

I propose to continue the use of this treatment and to report the results, at some future meetings.

Before approaching the subject proper of these remarks, I deem it useful to briefly review with you the varied methods now followed in the treatment of these ulcers.

1. *Antiphlogistics* were advised, but they are subject to many objections in certain cases.

2. *Stimulants*, such as aromatic wine, ointments of styras, divers preparations containing red precipitate, solutions of vinegar of different strengths, various mineral acids more or less diluted; solutions of soap, more or less saturated; solutions of nitrate of silver, perchloride of iron, chloride of lime, blisters, carded cotton, and even the red-hot iron.

All of the above remedies are occasionally useful, but are frequently attended with many disadvantages in their use.

3. The *water dressing* as used in England.

4. Methodical compression, as effected by carefully applied flannel bandages, or by strips of adhesive plaster, or emplastrum vigo.

5. Electricity.

6. *Incisions*, in cases of retarded cicatrization.

7. *Destruction* of the dilated veins.

8. Lastly, by *skin grafting*.

I now reach the use of the sub-nitrate of bismuth, of the efficacy of which I was ignorant, until its use was so highly recommended by my friend and colleague, Dr. Mary Durand. The method of its application is as follows:

The bismuth is levigated, which means reduced to an *impalpable* powder, the ulcers and surrounding skin are carefully sprinkled with this powder to a thickness of several lines (3 mm.); over this a light pad of cotton wadding, retained in situ by a bandage applied sufficiently tight to create slight compression.

The limb is then placed in a slightly bent position, and absolute rest enjoined. At the end of three or four days this first dressing is removed. If there is found a commencement of cicatrization, which is frequently the case, the *adherent* scabs are respected, and those that are loose carefully removed. The same dressing is renewed, without washing or cleansing. The third dressing is made after a lapse of three or four days, according to the case. When the process of cicatrization is progressing favorably, dressings are renewed at much longer intervals. After the cicatrization is completed, for several days cold douches are practiced, upon the cicatrix, to strengthen the tissues, these douches are made with an irrigator, or other suitable instrument.

Mode of action.— According to Monnerat, Gintrac and others, sub-nitrate of bismuth is most generally an inert substance, covering the diseased parts, and affording mechanical protection as it were, against all causes of irritation, similar to that afforded by greasy applications, collodion, and salves generally. Sometimes, however, bismuth becomes a chemical agent, combining with the gaseous emanations, watery exudation, mucus, or acid, and acts as a disinfectant.

This chemical action is proved in the intestinal canal by the production of the sulphide of bismuth, and by another circumstance that the *curative* and beneficial effects of bismuth are never more evident than when the dejections are blackened and sulphurous.

I am not certain that the action of the sub-nitrate of bismuth may not be due in some measure to the presence of a certain amount of acid, which it almost always contains in the ordinary specimens found in commerce.

To whatsoever it may be ascribed, the first effects of bismuth locally applied certainly are to rapidly reduce inflammation, relieve pain, and diminish secretion.

Certainly the position of the limb, rest and light bandaging, may be considered useful adjuvants in the process of cure. I have witnessed, however, in the *Invalides* under the care of Dr. Mary Durand, the use of the same treatment with the bismuth, the patients allowed to walk and take exercise while under treatment, where the cure was *delayed*, but not prevented.

In making this communication it is not my object to present a new remedy, possessing infallible action in all cases. No. I wish simply to call attention to a remedy possessing many qualities to recommend its trial in *varicose ulcers*, where the *rapidity of action*, and the infrequency of repeating dressings, are real advantages over many others hitherto employed.—*Journal de Medicine*, abridged from the *New Orleans Medical and Surgical Journal*, Feb., 1883.

TREATMENT OF NOCTURNAL EAR-ACHE IN CHILDREN.

By A. D. Williams, M.D.

What physician has not been puzzled to know what to do for the constantly recurring earaches of children at night? Some children cry night after night from pain in one or both ears. They cannot sleep themselves, and will not let others sleep. During the day they are not bothered at all, but as soon as they retire at night the earache begins, and with it the poor mother's trouble begins. All pains are worse at night than in day-time. It is quite probable that the ears of such children are more or less painful during the day, but their attention being entirely occupied with their plays, they do not notice the pain. At night, their minds not being otherwise occupied, the slight exacerbation that naturally takes place then is sufficient to keep such children from sleeping.

Now, what is the best treatment for these night earaches in children? The most effectual treatment that I have ever used, or seen recommended for this trouble, is the local use of a solution of sulphate of atropine. I brought this method of treatment to the notice of the profession some years ago, and have had no occasion since to change or even modify it, its effect being so very satisfactory. In fact, I have not yet met with a case of this kind which was not at once relieved by the local use of atropine. The solution is to be simply dropped into the painful ear, and allowed to remain there for ten or fifteen minutes. Then it is made to run out by turning the head over, the ear being wiped off with a dry rag. The solution may be put in cold, though it is better to have it slightly warm, as it does not shock the child so much. From three to five drops should be used at a time.

The strength of the solution must vary according to the age of the child. Under three years, one grain to ounce of water; over three years, two grains to ounce of water; and over ten years, four grains to ounce of water. In a grown person, almost any strength can be used. In a small infant, not more than half a grain to ounce of water should be used. All ages will bear a stronger solution in the ear than in the eye.

The application should be repeated as often as may be necessary. It is not often necessary to use it more than once the same night. Usually, a few applications permanently stop the pain.

The good effect of atropine in painful ears is because of its anodyne power. If physicians will try this plan of treatment in this class of cases, I am sure they will not be disappointed. In acute abscesses of the drum, and acute inflammation of the external meatus, the atropine will only slightly palliate the suffering, but in the recurrent nocturnal earaches of children it is practically a specific. —*Medical Brief.*

TREATMENT OF CHRONIC ABSCESSES BY INJECTIONS OF ALCOHOL.

M. Assaky reports fourteen cases of chronic abscess treated after Professor Gosselin's method. This method consists in the injection of alcohol, and is based on the antiseptic properties of this agent, and its action on inflamed or suppurating tissue. An incision about a third of an inch in length is first made, and the abscess-cavity, after its contents have been discharged through this opening, is washed out with alcohol of 90 deg. strength. The quantity of injected alcohol varies according to the dimensions of the abscess. It is necessary that the quantity be sufficient for application to the whole of the internal surface of the cavity. The seat of the emptied and injected abscess is then covered by a dressing of camphorated *eau-de vie.* On the following day there is an abundant secretion of dark-coloured and thick fluid. The secretion diminishes in quantity from day to day, and, as it diminishes, its density becomes lower, and its colour lighter. In the ultimate stage of the treatment it presents a serous transparent fluid resembling lymph. When, on pressure, this serous fluid only can be forced out, and in small quantity, the abscess is on the point of becoming healed, there is no longer any cavity, the walls are adherent to each other, and there remains but the small incision, which closes in the course of two or three days. This method, M. Assaky states, has the following advantages; it necessitates only a small wound of the integument, and so there is less risk of the ordinary complications of wounds, and the cicatrix is small and is hardly apparent. The superiority of the method, however, consists chiefly in the considerable abridgment it effects in the duration of the treatment of chronic abscess. It is very evident, M. Assaky states, that the number of days occupied in the healing of an abscess by this method must depend on the extent of the sac. But all other things being equal, the duration of treatment, in a case of abscess punctured and injected after Gosselin's method, is much less than that of one submitted to ordinary methods. In small abscesses, and those of medium size, cure may be effected between the second and seventh days. This treatment may be applied to any chronic abscess that is circumscribed, and consists of one regularly shaped cavity. In most cases, one injection only of alcohol is necessary; but when the abscess is very large, two or three may be required. The indication for a repetition of the injection would be a persistent purulent discharge. The injection of alcohol into the inflamed tissues, it is asserted, is not very painful. The pain varies with the sensitiveness of the patients. One will complain of lancinating pains, and of burning or pricking sensations which will last from ten minutes to an hour, whilst another will not complain of any painful sensation. Sometimes, though rarely, the injection of alcohol is followed by more or less extensive sloughing of the skin.

This result has seemed to M. Assaky to have been usually associated with too long delay on the part of the patient in applying for treatment, so that the seat of the abscess has become much inflamed, and the skin hot, red, and very tense. Associated with this condition, there may be a further cause in some faulty diathetic condition of the patient.—*Gaz. Med. de Paris*, Nos. 6 and 7, 1882, and *London Med. Rec.*, June, 1882.

RULE FOR EXAMINATION OF URINE.

1. Sediment in the urine has no significance unless deposited within twenty-four hours.

2. Albumen in the urine does not indicate kidney disease unless accompanied by tube-casts. The most fatal form of Bright's disease—contracted kidney—has little or no albumen.

3. Every white crystal in urine, regardless of shape, is a phosphite, except the oxalate of lime, which has its own peculiar form, urine alkaline.

4. Every yellow crystal is uric acid if the urine is acid, or a urate if the urine is alkaline.

5. Mucous casts, pus, and epithelium signify disease of the bladder (cystites) or of other parts of the urinary tract, as determined by the variety of epithelium.

6. The urine from females can often be differentiated from the urine of the male, by finding in it the tesselated epithelium of the vagina.

7. Hyaline casts (narrow), blood, and epithelial casts signify acute catarrhal nephritis. Much albumen.

8. Broad hyaline casts and epithelial dark granular and oil casts signify chronic catarrhal nephritis. At first, much albumen; later less.

9. Hyaline and pale granular casts and little or no albumen signify interstitial nephritis.

10. Broader casts are worse than narrow casts, as far as diagnosis is concerned, for the former signify a chronic disease.

11. The urine should be fresh for microscopical examination, as the micrococci will change hyaline casts into granular casts or devour them entirely in a short time.

12. Uric acid in the urine may in Trommer's test for sugar form a protoxide of copper, thus often deceiving the examiner in the belief that he has discovered sugar. Thus when urine shows only a trace of sugar, other methods of examinations besides the Trommer's must be used—preferably the lead test.

13. The microscope gives us better ideas of the exact condition of affairs in the examination of urine than the various chemical tests. Therefore the time has come when every true physician should know how to handle a microscope.— Dr. Formad, *Louisville Med. News.*

THE CAUSES AND TREATMENT OF PRURITUS VULVÆ.

In a clinical lecture on this subject (*British Medical Journal*, Vol. I, 1881, p. 327) Dr. Wiltshire mentions the animal and vegetable parasites as frequent local causes of this condition. Ascarides, pediculi, and acari are among the former, and certain low forms of vegetable life, as thrush fungus (*oidium albicans*), among the latter. Among other local causes we have—1. Diseases of the vulva (as vulvitis, abscess, carcinoma, oozing tumor, lupus, elephantiasis, etc.); 2. Diseases of the urinary system (urethra, bladder, and kidneys); 3. Vaginitis (gonorrhœal and other); 4. Diseases of the uterus (metritis, endometritis, senile catarrh, cancer, fibroids, polypi, acrid discharges arising from the foregoing or occurring mainly in association with menstruation; 5. Skin affections (eczema, ecthyma, herpes, urticaria, acne, etc.). As regards the latter, eczema may be associated with diabetes, producing terrible suffering, while urticaria suggests ovarian disease. Ecthymatous spots with ashen-gray bases may indicate grave cachexy (syphilitic?); while the herpetic vesicles are prone to crop out periodically in females of gouty parentage just before each menstrual period. A pustular form of acne is sometimes accompanied by troublesome itching. Venereal warts may excite itching.

Malignant disease of the uterus and upper part of the vagina may provoke itching in two ways: First, by acrid discharges; and secondly, reflexly—the latter uncommonly. The same may be said of fibroids, polypi, sarcomata, etc. Dr. Wiltshire has known pruritus to exist for a long time apparently as a consequence of pelvic effusions, *e. g.*, hæmatocele, cellulitis, partly, perhaps, from venous obstruction and partly from implication of nervous structures. Some discharges from the womb are virulently acrid, and excite excoriation of the parts over which they flow. These are revealed by the speculum. Urethral and vesical affections—*e. g.*, vascular growths, stone, incontinence, etc.—are sometimes complicated by vulvar itching. Careful local investigation is therefore necessary; for even when some general condition, as diabetes, is present, the local condition may give valuable information.

Among general causes we find diabetes, pregnancy, gout (or lithiasis), syphilis, and pruritus senilis. Diabetes is not an uncommon cause, and vulvar pruritus may be one of the first symptoms which lead to its detection. Pregnant women are liable to a severe form of pruritus vulvæ, accompanied usually by an abundant creamy discharge. Sometimes aphthæ or erosions are seen upon the turgid labia or cervix, or there may be vaginitis granulosa. Most of the cases which Dr. Wiltshire has seen have been accompanied by extreme venous turgescence. Gouty pruritus is apt to be brought on by indulgence at the table or any diet which increases the deposit of lithates in the urine. Chan-

cres and venereal warts [which last Dr. W. apparently considers syphilitic.—Ed.] may provoke irritation. Pruritus senilis is often associated with general cutaneous hyperæsthesia. Klob says there are little elevations of the skin, like goose flesh, consisting of growths analogous to tubercular formations, and giving rise to violent itching. These cases are grave. Some are amenable to the bromides used locally as well as internally. Arsenic and cod-liver oil are also indicated.

All forms of pruritus vulvæ are subject to periodical exacerbations. Some patients suffer only at night, after becoming warm in bed, experiencing comparative freedom during the day. All who menstruate are conscious of aggravation at that time. Stimulants, as a rule, exert an injurious effect. Sedentary occupations, piles, and hepatic disorders aggravate pruritus.

In the treatment of Pruritus Vulvæ, Dr. Wiltshire says that the first thing is to find, if possible, the cause. Extreme cleanliness must be enjoined. Demulcent washes are better than soap; unless carbolic or coal-tar soap be used; and usually even these are inadmissible. Almond meal, strong bran-water, decoction of rice, marsh-mallow, slippery elm, or fine oatmeal are suitable, especially the first, which, if pure, yields during use a marked odor of hydrocyanic acid and appears to soothe materially. When the pruritus is due to animal parasites, ointment of white precipitate, sulphur, or stavesacre speedily cures by destroying the insects and their ova. If nits persist about the pubic hairs, a lotion containing bichloride of mercury and acetic acid will dissolve them. Ascarides are destroyed by a carbolic lotion (1 to 60): general treatment, however, should be used, as iron, quinine, cod-liver oil, together with enemata of hamamelis, lime water, iron, etc.

The vegetable parasites are treated by washes of borax, boracic acid, sulphurous acid, etc. Parasiticide lotions are certainly the most useful in the majority of cases, which points towards vegetable organisms as the commonest cause of the pruritus. The borax lotion should be of the strength of a drachm to five ounces of warm water, or stronger; hydrocyanic acid, say ℥ j of the dilute acid, to water ℥ x, or morphia (2 gr.), atropia (½ gr.), aconitia (½ gr.) or veratria (½ gr.) to the same amount. Infusion of tobacco (half an ounce to the pint) alone relieves some cases, and forms a good vehicle for borax or boracic acid. It is not well to use glycerin with the borax, as a rule, as it is apt, owing to its affinity for water, to aggravate the irritation. Strong solution of poppy is a good vehicle for borax. Chloral frequently does not suit. Ice suits some, very hot water others. In some cases ether spray might be tried. Ointments, if used, should be of non-rancid fats or cosmoline. Two drachms of iodine [tincture ?] in two ounces of elder-flower water sometimes answers. Electricity may afford relief in neurosal cases. Probably faradism would be the preferable form.

In simple vulvitis, borax or carbolic acid lotions relieve. An ointment of calomel or bismuth is also good. Malignant affections of the parts call for ablation, but where this is not practicable sedative applications (conium, opium, belladonna) alone are often all that we can employ.

Of course urethral carbuncles, urethritis, vaginitis, etc., should receive thorough treatment. When there is congestion with loading of the portal circulation a mercurial and saline purge is helpful. When eczema with fissure is present, a poultice made of the clot formed by adding two drachms of lead-water to ten ounces of new milk is most useful. Diabetes must of course be combated, and frequent ablutions with borax washes form a good local treatment. In wakefulness from diabetic pruritus, codia in one-grain doses in pill is often useful. The bromides are also useful.

Pregnant women often suffer terribly. When *oidium albicans* is present, sulphurous acid gives relief. A tablespoonful should be freshly mixed with half a pint of warm water, barley-water, or almond emulsion for each application. Chloroform locally, in liniment, ointment, lotion, or vapor, answers well occasionally; bichloride of mercury, gr. iv, ad ℥ viij mist. amygdalæ, gives relief in some cases. It should not be used when there is abrasion. Section of the pudic nerve has been suggested in desperate cases, but has never been practised.—*Philadelphia Medical Times.*

NEURO-DYNAMIC MEDICINE.

Dr. B. O. Kinnear contributes an interesting and valuable article to the Boston *Medical and Surgical Journal*, on Dr. Chapman's system of neuro-dynamic medicine. This system consists in the theory that ice in disease, used properly, in rubber bags of the right length and width, over the spinal and sympathetic centres, dilates the arterioles controlled by such centres, and arrests at the same time hypersecretion from the glandular system, checks spasmodic and irregular muscular movements of voluntary and involuntary muscles, and arrests hypernutrition by its sedative action upon trophic centres. Heat used likewise acts in an exactly opposite manner. He has been able to relieve the pain of neuralgia, in some cases by ice and others by heat, as quickly and in many instances more rapidly than by hypodermic injections of morphia. Besides the swift relief afforded, this method of treatment has the additional advantages of not producing nausea, vomiting, headache or any other bad symptoms. In a case of agonizing pain from passage of gall stones, ice was applied over dorso lumbar region, and in *three minutes* all pain and tenderness had disappeared, whereas in previous attacks morphia had been wholly inadequate to relieve the suffering. In wind colic, applied over the same region, it will give immediate relief. It will relieve bilious attacks and sick headache

when applied over same region. In acute diarrhœa it will check the bowels, allay vomiting if it exists, and in the severer forms will restore warmth to cold and cramped extremities. In the vomiting of pregnancy, carefully used, it promises much. In gastritis, in simple leucorrhœa, and in constipation, he has used it advantageously. He has derived excellent results in hysteria from the effect of ice in subduing the hyperæmia of the sympathetic ganglia, and those spinal centres which give rise to the muscular spasm when unduly excited, as in these cases. In sleeplessness due to excessive use of the brain, from almost any cause, ice applied low down (dorso lumbar region) will produce sleep by dilating the arterioles of the lower body, thus withdrawing from the cerebral circulation its excessive supply, the cause of the sleeplessness. When the ice is not sufficient, thus applied, to have the desired effect, a double-columned hot water bag may be used over the sympathetic ganglia of the cilio spinal region of Chapman, or, in other words, the cervico-dorsal vertebræ, and will assist, by stimulating these ganglia, to a hyperaction, causing thereby a contraction of the blood vessels of the brain. He used it with benefit in one case of asthma.

Dr. Kinnear, in conclusion, says: "I would again suggest to those of my medical confrères who may decide to try this method, not to do so without a careful attention to those *dangers* with which a careless or ignorant application will certainly bring them face to face. Upon these *dangers* Dr. Chapman gives very clear and minute directions and cautions."

VENESECTION IN HEART DISEASE.

In the *Lancet*, Dr. Bedford Fenwick, in the course of an interesting article on this subject, says that his attention was first called to the value of venesection in heart disease by a mere accident. A young man was admitted into the hospital with mitral stenosis and aortic regurgitation. His condition became gradually more and more critical until he became drowsy, almost comatose, and his death was hourly looked for. When in this condition he threw up his arm, and striking his nose violently, it began to bleed very freely. Attention being called to another patient, his nose was allowed to bleed, thinking that it would soon stop. He lost some twelve or fourteen ounces of blood, and when again examined was found perfectly conscious, breathing quietly, and calmly said that he felt much better. His improvement was uninterrupted, and in a few days he returned home. Loss of blood is a common cause of fatty degeneration, therefore it would not be wise to bleed where we have or fear fatty degeneration.

Dr. Fenwick only uses leeches or cupping to remove blood directly from the cardiac region in cases where stenosis exists. He imagines that we obtain thereby more certain and more rapid results with a more accurate loss of blood than when venesection from the arm is resorted to. Still this is a matter of such great practical importance to the patient's welfare and to our own success, that he feels bound to state distinctly some reasons for his judgment: 1. The patient and the patient's friends usually object less when leeching or cupping is suggested, than when "bleeding" is proposed, and they are less alarmed at a local application to the seat of disease than at the procedure necessary to open a vein and keep it bleeding. 2. The quantity of blood to be abstracted can be more accurately measured and controlled, and is generally much more easily obtained, in cases of advanced stenosis, by local than by brachial venesection. 3. Even as, like all practical men, he gives a hypodermic injection of morphia at the seat of pain, although he cannot explain why its insertion there should give so much greater and more rapid relief than when introduced into the same blood at a distance, so he cannot explain why a little blood removed from the cardiac region should afford greater and quicker relief than is derived by the abstraction of even a somewhat larger quantity from the arm. He does the former and leaves the latter undone in these cases, because he is convinced of the great practical truth that thereby greater good is gained.

He has been astonished to find how drugs which had been given for days or weeks without apparent benefit, as soon as even a little blood has been removed, seem at once to assert their power again. Next, with regard to acute pericarditis and endocarditis, he has not had the opportunity of using venesection in many such cases, but where he has done so he has invariably bled by cupping the cardiac region, and always with good result—so successfully, indeed, as to make him believe that if this measure be taken at the onset of the disease it will very often, if not always, cut the attack short, or at least greatly mitigate its severity.

Finally, with regard to pain, more or less severe and more or less persistent in the cardiac region, he has found nothing give such rapid and complete relief as local abstraction of blood. In conclusion, he summarizes thus:—

1. In cases of valvular stenosis, if dyspnœa, or pain, or urgent symptoms be present, bleeding is generally useful; that it appears to be better to bleed often, if necessary, but to take only a small quantity each time, and this by means of leeches or the cupping glass, direct from the cardiac region.

2. In cases of valvular incompetency, if urgent dyspnœa or cyanosis or stupor be present, it appears best to bleed freely from the arm, to about sixteen or twenty ounces, if necessary, and if possible once for all.

3. In cases of acute pericarditis and endocarditis the attack may possibly be cut short by freely cupping the cardiac region at once.

4. In cases of cardialgia, without any evident cause, leeching or cupping over the heart's area will probably give relief.

IRRIGATION OF THE COLON.

By Charles W. Dulles, M.D., Surgical Registrar to the Hospital of the University of Pennsylvania.

As we are now getting into that season when diseases of the intestines carry off the greatest number of victims, I desire to call attention to a method of treating inflammations of the colon, which has never—as far as I know—been at all generally adopted or even understood in this country; although it is not uncommonly practised in Europe. It is not difficult or dangerous; on the contrary, it is simple and easy to carry out, and it cannot possibly do harm. The method was called by Dr. Alois Monti, of Vienna, whom I saw practice it often in 1876 and 1877, "irrigation of the large intestine."

It is carried out in the following manner: The patient being placed on the side, or back, or with the belly downwards, and the pelvis a little elevated, a large, moderately flexible catheter, if for an infant or child—or a stomach tube, if for an adult—is inserted in the rectum. To this is attached, by a tube, a reservoir of water,* the height of which can be varied as may be required.

The water is now allowed to flow from a height of about two feet, until the rectum is distended; meanwhile the end of the catheter or tube in the rectum is pressed gently but steadily upward toward the left iliac fossa. Very soon it will be found that the water has opened out the folds of the bowel and straightened the curves, so that the tube finds its way beyond the sigmoid flexure and into the descending colon. Unless the operator be very unskillful it may now be pushed gently on, the flow of water continuing without interruption, until it reaches the left hypochondrium, when the transverse colon becomes the descending.

The flow of water is now to be continued until the whole colon, all the way to the cæcum, has been gently distended; the operator assuring himself of this by the amount of fluid used, and by palpation and percussion. The tube is now withdrawn and the operation is complete.

The fluid remains in the bowel a variable length of time. Sometimes it begins to come away in a few minutes; but it sometimes remains a half an hour or more.

This method I have seen used by Monti for various inflammatory disorders of the large intestine, as well as to cause expulsion of worms and flatus; and I have myself used it a number of times with results calculated to give me great faith in its usefulness.

The most striking case, I now recall, occurred in 1878, when I was summoned in the night to an infant a few months old, whom I found screaming and struggling with the pains of acute colitis. I took it on my knee, had cool water and a fountain syringe brought, attached the silver catheter from my pocket case, oiled it and slipped it first into the rectum and then up to the bend of the colon, and allowed about a pint and a half of water to flow in at that point. As the water filled the bowel the child's struggles and cries ceased, and it actually went to sleep before I was done, and only waked when the water began to be discharged.

Such striking results cannot be considered the rule, of course; but there can be no doubt that so complete a lavement must be of advantage in soothing the angry lining of the bowel and diluting and bringing away both the cause and the products of irritation.

To fill the outlines of the method a little, I will add that in general the fluid used should be cool, not cold water. It is rarely necessary to use astringents. When they are desired, the best is alum, in a one or two per cent. solution, with perhaps a few drops of laudanum added. The irigations may be frequently repeated; and, incrases that do not get well promptly, various temperatures may be tried—from 70° or 80° to 40° Fahr.—depending on circumstances.

The amount of fluid to be used varies with the age of the patient. It should always be enough to fill the *entire* colon. An unweaned infant may require more than two pints, an adult several quarts.

No real syringe should be used if hydrostatic pressure can be obtained; though, if this is not to be had, I have found the syringe, carefully and slowly used, will serve very well.

Thus far I have referred mainly to such intestinal troubles as are most frequent in summer. The method is, I think, invaluable in all inflammatory affections of the colon, from diarrhœa to dysentery, and useful—for reasons I cannot go into now—in inflammation of the small intestine also.

Before leaving the subject, I want to speak of another use which I learned by experience last winter. I was called into the country to see a child about two years old, whom I found in convulsions. The use of revulsives had been tried without effect. I could get nothing in its mouth to produce vomiting or catharsis. The means at hand were very limited. I was satisfied from the history that the convulsions were due to irritating ingesta. I concluded to see if they were in the colon. So I took my silver catheter, attached it to a syringe, passed it through the anus, distended the rectum, pushed the catheter up till I could feel it through the abdominal wall, just below the left costal cartilage, and filled the whole colon with warm water, in which a little soap had been stirred. After about three minutes the water came away and brought a mass of undigested and indigestible stuff that was quite sufficient to cause the trouble. The convulsions stopped, and the child got quite well.

* A fountain syringe or any of its substitutes serves this purpose well.

From this case, I think, a useful hint may be gathered, and I am sure I shall repeat my experiment the next time I have to treat a case of convulsions due to intestinal irritation.

I recall attention to this method because I think it too valuable to be allowed to be forgotten; and I hope that it may prove a helpful adjunct to our other therapeutic resources against intestinal disorders.—*Medical News.*

CONVULSIONS IN CHILDREN.

Infantile convulsions must always possess for the practical physician a keen, almost a fascinating, interest. The cases are by no means of equal importance—some may be immediately dangerous to life; some may be merely symptomatic of diseases varying immensely in severity, and some may possess but little significance. As regards the symptom—convulsion—the phenomena are various. The convulsions may be general, and involve all the muscles of the animal life, or they may be limited to a single group of muscles. The symptomatic and the therapeutical diagnosis demand the clearest conception, the greatest fertility of resource, and the utmost promptitude of action.

As above suggested, a convulsion may mean much or little. At the outset, it is best to have as definite a conception as possible of what a convulsion is. That the pons varolii and medulla oblongata are centres of reflex actions has long been known, but it was reserved for Nothnagel to demonstrate the position and define the limits of the "spasm centre." Irritation of this centre induces general convulsions, and this irritation may be direct or reflex, centric or excentric. The results of experimental physiology receive support from pathology. Ladame, in his *Hirngeschwulste*, has formulated this conclusion: When the symptoms of brain tumor exist, if there are convulsions, the tumor is not in the medulla, which may be interpreted as follows: When a tumor develops in a position to injure the *spasm centre*, convulsions become impossible because the injured part has lost its power of functionate.

Various causes increase the irritability of the spasm centre. Abnormal irritability may, indeed, be hereditary. It is well known that certain families exhibit the tendency to convulsions, and all the children may experience attacks, or they may be confined to one sex. This tendency may be so strong that infants in the womb are affected, but it is in the first two years of infantile life that the greatest irritability of the spasm centre is found to exist. Beside this tendency, which is inherited, various constitutional states increase the liability to attacks of eclampsia. Rickets has a prominent position as a pathogenetic factor. This state acts, probably, by so increasing the irritability of the centres of reflex action that very slight peripheric irritation sets off the high-strung spasm centre. The state of nutrition of the child is not without influence. When much reduced by long illness, the reflex functions are correspondingly lowered, and hence when, under such circumstances, convulsions occur, it is reasonable to suppose that no peripheric irritation has sufficed, but that some "coarse lesion" of the intra-cranial organs is the cause. Hence it follows that the nutrition of the child suddenly attacked with convulsions has diagnostic value; if the child be fat and healthy, the convulsion is a symptom of some excentric irritation; if week and emaciated, it signifies some centric lesion, notably tuberculous. It is not affirmed that such a rule has no exceptions—only that it has diagnostic value.

It is important to distinguish between eclampsia and epilepsy. Age is an influential element. If a convulsion occur after four or five years of age, if it is over in ten minutes, and no cause can be discovered for it, these constitute good grounds for suspecting epilepsy. If the attack is accompanied by high fever, if albumen can be detected in the urine, or if some acute disease follow, the seizure is one of eclampsia, although the patient may be anywhere from two to ten. Again, the character of the attendant phenomena—the behavior of the convulsion itself—throws strong light on the diagnosis. When the convulsions are limited to the face, to one limb, to one side of the body, it may be concluded that the lesions are intra-cranial. Again, if any part, the seat of convulsion—the face, the limbs, etc., should continue paretic or paralyzed for some days after the seizure, or if a squint should continue, or an eyelid droop, or the pupils remain unequal, cerebral lesions probably exist.

The prognosis of convulsions is usually difficult. When arising from intra-cranial lesions, the prospect is gloomy. Such evidences of cerebral mischief as squinting, irregular pupils, coma, etc., are of evil omen. In the convulsions due to uræmic poisoning, the most unfavorable symptoms may be recovered from, but the case wears a less hopeful aspect the more persistent the failure of the urinary excretion. When the breathing continues labored, and there is deep cyanosis, with lividity of the face, and the pulse is very rapid, the case has a most unfavorable appearance. A convulsion at the onset of an acute affection, as scarlet fever, affords no certain indication of the future gravity of the disease, but does illustrate the mobility of the nervous centres. Convulsions occurring toward the close of an acute disease, are unfavorable, and often signify that the disease has taken a more serious direction, or that tubercular meningitis has come on. In some children so irritable and mobile is the reflex centre of spasm that but trivial peripheral impressions suffice to bring on convulsions. Amongst other causes, are indigestible food, swollen gums, earache, etc. Such children may have repeated attacks, which, if known, must lessen the gravity of the prognosis. A guarded opinion should be given as respects the future condition of such children, for if convulsions

occur readily during the first and even second dentition from slight causes, this is a reason for apprehending the subsequent occurrence of epilepsy. Habit is such an influential factor in determining attacks of nervous diseases that we may well be solicitous regarding its power here.

The treatment of convulsions has an importance determined entirely by the cause of the seizures. Is the attack merely an excited state of the spasm centre from simple peripheric irritation? Has the child eaten some indigestible food? Are there worms, irritating foods, scybala, etc., in the intestinal canal? Is there a stone in the bladder, preputial irritation, or other source of irritation in the genito-urinary tract? Has sufficient urine been passed, and is the urine albuminous? Is an acute disease beginning, and is fever present? Has the child passed through an illness recently, especially of scarlatina or whooping-cough? Is the child emaciated? Has the child rickets? The treatment is much influenced by the answers to these questions. Causes of irritation must be at once removed by emetics, purgatives, vermifuges, etc., as required. Then follow the measures to allay the excitability of the spasm centre; bromide of potassium, chloral hydrate, and the inhalation of chloroform. When time presses, the last-mentioned expedient has great value. It is sometimes advised to administer ether instead of chloroform, but this suggestion indicates a failure to appreciate the excitant qualities of the former. Chloroform is well borne by children, and is more effective than ether. Chloral, by the rectum, renders an incontestable service. It is safe in the case of children; it is effective, and, although not so prompt, is more sustained in action than chloroform. Bromide of potassium is most useful after consciousness is restored to prevent future or impending attacks, or to allay the excitement, muscular twitching, etc., which may indicate the onset of convulsions. When swallowing is impossible, bromide may also be given by enema, and it may be combined with chloral for all of the purposes to which the latter is applied. If the surface is cold, the circulation feeble, and the skin dry, the child should be put in a bath 100° Fahr. If the same conditions exist in a moist and clammy skin, dry heat should be used, the articles affording it having a temperature of 100° also. If, on the other hand, the temperature of the child is high, reaching 103°, 104°, or 105°, or more, the cold bath, or the cold wet pack should be employed without hesitation. The character of the bath prescribed will necessarily be affected by the state of the urinary secretion. If it is necessary to compensate in an increased action of the skin for the diminished activity of the kidneys, a warm or vapor bath may be necessary. If albuminuria exists, and the urine is very scanty, the convulsions being distinctly uræmic, a very powerful action of the skin must be secured, and this can be affected by no measure so successfully as by pilocarpine. There can be no doubt of the great good accomplished by this remedy under these circumstances, but any prudent practitioner will avoid inducing a dangerous cardiac depression by the use of large doses. Compensation for the diminished urinary secretion can also be obtained by free catharsis.

We should not fail to mention the remarkable results obtained by Loomis in cases of uræmic convulsions, by the hypodermatic injection of full doses of morphia. Although such treatment has been applied to adults only, and may be inadmissible in children, it throws light on the therapeutical diagnosis. In the simplest cases, almost no treatment may be required. A child has eaten an indigestible meal, has a convulsion, and vomits freely. The stomach emptied, the nervous disturbance ceases, but it is always well in such cases to prescribe some bromide of potassium to allay the reflex irritability and the excitement of the spasm centre. Here, as under all circumstances, no treatment should be instituted that is not the result of a careful survey and a logical deduction from the facts.—*Medical News Editorial.*

THE CANADA MEDICAL RECORD,

A Monthly Journal of Medicine and Surgery.

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SUBSCRIPTION TWO DOLLARS PER ANNUM.

All communications and Exchanges must be addressed to the Editors, Drawer 356, Post Office, Montreal.

MONTREAL, FEBRUARY, 1883.

THE COLLECTIVE INVESTIGATION OF DISEASE.

The British Medical Association has recently inaugurated a scheme for the collective investigation of disease, which bids fair to become a decided success. Professor Humphrey of Cambridge in his Presidential address of 1880 so earnestly advocated the merits of collective investigation that steps were immediately taken to carry out his suggestions. Fifty-four Committees, including from eight hundred to a thousand of the leading practitioners of England, Scotland and Ireland, have already organised to prosecute the work, and cards of enquiry issued concerning acute pneumonia, chorea, acute rheumatism, contagion of phthisis,

diphtheria and certain sanitary questions. The response has, so far, been most encouraging.

It has long been felt by general practitioners that, no matter how zealously they may prosecute their enquiries, they can accomplish very little single-handed, owing to the press of their daily work, their limited opportunities for observation, and the vastness of the field. General conclusions based upon individual experience are imperfect, and often misleading. Original work has been left chiefly to hospital men, whose experience is larger and more varied; and the bulk of the profession have been generally content to accept their conclusions and teachings. But the hospital physician also labors under certain disadvantages which materially affect the accuracy and reliability of his conclusions. As Sir William Gull admirably puts it (*British Medical Journal*): "In hospitals we have more largely to do with organic lesions and with isolated cases of acute inflammations or developed fevers, and in all with an incomplete personal history and without any family record. We cannot thus learn with any exactness either the beginnings or endings of disease. Patients come under observation with their maladies far advanced, and often pass from observation but imperfectly cured, thus leaving fallacious histories, both in pathology and therapeutics; and if they die, morbid anatomy can often give but a confused and inextricable mass of facts, which it may be difficult or impossible to put into their true relations. One might as well hope to determine the physical geography of a country by measuring and analysing the contents of its rivers as they fall into the sea, as to hope to reach a true pathology from studying alone the results of disease on the *post mortem* table. In disease one stream of morbid action naturally falls into another; and whilst morbid anatomy gives us the final synthesis of results there is but one possible means of analysis, and that through noting beginnings order and progress. When the morbid anatomist is engaged in our hospitals and medical schools in demonstrating the effects of disease on the several organs and tissues of thef body, we desire that all the practising members o the profession over the country, in the colonies, and in other parts of the world, should assist in the inquiry as to the origin of diseases, their early symptoms, their mode of spreading in families, their combinations, the causes of their intensity, their modifications in individuals, in families, their occurrence according to time of year, locality, sanitary conditions, occupations and many other circumstances—some as yet but dimly discerned, and others not yet suspected. The value of this movement will be obvious, for had we leisure, proper means at our disposal and, from previous training, a fitness for observation, we should find in general practice one of the most valuable fields of pathology, as here only we have before us the earliest signs of departure from health, and the only opportunities for tracing the course of a disease from its beginning to its end. Having passed many years in hospital and private practice, I have come to see that experience gained in the latter is necessary for the correction of that acquired in the former, especially as helping towards a truer pathology. We must have in many instances the life histories of the parents or more remote ancestors, before we can fully unravel the causes of irregular menstruation, hysteria, anorexia, uterine flexions and the like. And the same line of inquiry applies to the headache, pallor, dyspepsia and seminal hypochondriasis of the males of such families. The hereditary transmission of the rheumatic diathesis, its occurrence in intra-uterine life (as appears to be shown by some of the congenital cardiac malformations) and its association with other diseases prevailing in the same family, throw a light on its pathology not to be gained at the bedside or in the *post mortem* room. Life histories, as Sir James Paget pointed out, would give us the genesis of new and rare forms of lesion, and I hope I may add they would also show how the organic laws, favored through generations, prevail over and wear out disease from the stock. Take the inquiries of to-day respecting infectious diseases, and the increasing evidence that such states are due to agents which we may hope to fix and analyse. How is it that the same poison acts with such varying intensity in different families; in some the organism breaking down at almost the first touching of a poison; others suffering but little; and others having almost or altogether immunity. Does this depend upon certain family peculiarities; and if so, what? Does the immunity come from ancestors having passed through the ordeal, as occurs to the individual in vaccination and syphilisation? Family histories will show us how far these immunities and susceptibilities extend; and with what peculiarity of the nervous system they are associated, and how acquired."

It is to be hoped that the excellent example set by the British Medical Association will be speedily followed by other Associations. We in Canada have many promising fields for investigation, especially in sanitary matters, but we will have little share in the solution of these interesting problems unless we make a united organised effort. What Professor Humphrey amongst us will begin the good work?

ADULTERATION OF BRANDY.

Some startling revelations have recently been made by the U. S. Consul at Rochelle regarding the quality of the liquor exported from France as brandy. He states that the whole business has become a gigantic fraud, and that little or no genuine brandy can be obtained, even by purchasers upon the spot. All the owners of large vineyards are distillers, and they are said to be heaping up colossal fortunes by manufacturing beet and potato spirit, which, by judicious diluting and flavoring, is made to resemble in taste and appearance brandy of any required age or make. When they sell brandy purporting to be twenty or thirty years old, or of a particular vintage, they simply mean that the article looks and tastes like genuine brandy of that stated age or vintage. The vile compounds with which the market is being flooded are highly injurious, not only from the irritating properties of fresh beet and potato spirit, but also from the poisonous qualities of the flavoring and coloring ingredients. As brandy ages, it loses its fiery properties, gains aroma and bouquet, and is then more suitable for medicinal purpose. Fresh new brandy should never be prescribed. It is therefore somewhat startling to learn that we cannot procure a genuine old brandy at any price, even from direct importers, and that we are probably prescribing for our patients the vile combinations of fraudulent French distillers instead of a bland and potent stimulant. If these corrupt practices are not speedily amended, the profession will have to seek elsewhere for a pure and reliable form of alcoholic stimulant, suitable for internal administration.

TUBERCLE-BACILLI IN URINE.

In the last number (No. 5, Feb. 3) of the *Centralblatt f. d. Medicin Wissens.* Professor Rosenstein announces that he has been able to demonstrate the bacilli of tuberculosis in the urine of a patient with urogenital tuberculosis; Lichteim previously mentioned having found these organisms in the pelvis of the kidney of a patient dead from the same disease. The case reported by Rosenstein is one of a man aged 37, with a good family history. Up to four years ago he was quite healthy. Then for the first time he complained of pain during, as well as previous to micturition. Two years ago he noticed, first in the right, later in the left epidydimis a hardness which appeared to be about the size of a small walnut. The testicles were quite free; no swelling of any lymph glands, nor was there present any sign of disease of the lungs. His general condition was good, no fever was present at any time. The patient passed urine in small quantities, about 50 grammes (1½ oz.) at a time. The total quantity in 24 hours varied between 800 and 1660 Cctm. (25 to 52 oz.), sp. gr. 1012 to 1018. Urine was of a pale yellow,acid, highly albuminous,cloudy even when just passed. Whitish flocculi about the size of the head of a pin floated in it. After standing, an abundant sediment of a whitish-grey color was deposited,composed almost exclusively o pus corpuscles and but very little blood. For examination, the urine was passed into a solution of thymol, and the fluid drawn off after standing 24 hours. A drop of the sediment was placed on a cover glass, dried in the gas flame, and treated according to Ehrlich's method. Observations made with Hartnack 3 obj. 9 shewed that in the smallest particles described as flocculi, bacilli were present in great numbers. Prof. Rosenstein further remarks that the urine preparations require 24 hours immersion in the staining solution, in this respect differing from those of sputa, which can be well seen after only half an hour immersion. He also considers it important that the urine preparations after decolorizing with nitric acid should be stained with a watery solution of methylene blue because, notwithstanding the urine may have been passed into a solution of thymol, the bacteria of decomposition might be present, in which case their blue color would readily distinguish them from tubercle bacilli.—Geo. Wilkins, M.D.

PERSONAL.

Dr. Louis Robitaille (M.D., McGill, 1860), a brother of the Lieut.-Governor of Quebec, has been called to the Dominion Senate.

Dr. J. A. Grant, B.A. (M.D., McGill, 1882), has passed the L. R. C. P. London.

Dr. Wolfred Nelson (C.M., M.D., Bishop's, 1872) has been appointed Port Surgeon of the Pacific Mail Steamship Company at Panama.

Dr. Kollmyer, Professor of Materia Medica in Bishop's College, is seriously ill. He has not been able to lecture since the end of November. Dr. William Young (Bishop's 1878) has read his, lec tures for him.

Dr. Kennedy, Professor of Midwifery Bishop's College, has been confined to the house since early in January by an attack of Pleuro-Pneumonia. He is now thoroughly convalescent, and will soon resume his duties. Dr. McConnell (Prof. of Botany) has read his lectures to his class.

OBITUARY.

Dr. Joshua Chamberlain, of Frelighsburg.

This gentleman, whose death took place on the 14th of January last, occupied a well-deserved position of esteem and respect among his confreres in this Province. He was born in the State of Vermont in September, 1799, and was thus in his 84th, year when he died. He came to Canada in 1810, and after some general medical experience among some of his relations who were members of the profession, he eventually determined to acquire a regular medical education. For this purpose in 1825 or 26 he became a student of the Montreal Medical Institute. In 1827 he passed his examination before the Montreal Medical Board, and received his license. He soon after settled in Frelighsburg, where he continued to follow his profession up to the period of his last illness. In the troubles of 1837 he took a prominent part in support of British connection. He acted as a combatant officer in the Skirmish at Moore's Corners, and subsequently brought his medical knowledge into service and attended to the wounded. In 1849 he was elected a Governor of the College of Physicians and Surgeons, and was re-elected every tri-annual meeting up to 1880, when failing strength induced him to refuse re-election. In 1877 the College presented him with an engrossed address, congratulating him on having attained his 50th anniversary as a Practitioner of Medicine. He was a man of great ability of resource, and living as he did for many years in a sparsely settled country, this faculty was often called into requisition. He was of a jovial, hearty disposition, carrying sunshine wherever he went. A man with such a character could not but be beloved, and he was. Full of years, and highly honored by the public and his professional brethren, he passed away, but his memory and his example will be long cherished by those who knew him.

WOOD'S LIBRARY OF STANDARD MEDICAL AUTHORS FOR THE YEAR 1883.

We have received the first volume of this Library for the year 1883, with a list of the works which it is intended shall be issued this year. We believe that the subjects chosen for the present series are superior in every way to those issued last year. We draw particular attention to this fact, as we are aware that among some the last series issued did not give satisfaction. The volume before us is a "Manual of Gynecology," by D. Dewy Hart, M.D., Lecturer on Midwifery at the Edinburgh Medical School, and A. H. Barbour, M.B., assistant to the Professor of Midwifery at the Edinburgh University. We have given it a careful perusal, and believe that it will give satisfaction. It is profusely illustrated, and printed on paper superior to any yet used in the "Library." The binding deserves especial notice, the color is beautiful, and the workmanship leaves nothing to be desired.

REVIEWS.

The United States Pharmacopœia. New edition. Wm. Wood & Co., New York.

The United States Pharmacopœia of 1880, just issued from the press, very much resembles in general appearance and arrangement the British Pharmacopœia, but it is much better printed, the type more distinct, and the heading so arranged as to catch the eye readily, so that in searching for a preparation it is scarcely necessary to refer to the copious index at all. In size the book is full octavo, and the binding is everything that could be wished. The Committee of Revision and Publication was appointed at the National Convention for revising the Pharmacopœia (being the sixth decennial Convention) held in the City of Washington on the 5th of May, 1880, and was composed of twenty-five members, about one-half being pharmacists and the other half physicians. Nobly has

their work been done, and although it stands to reason that such a book cannot possibly be made to meet the peculiar views of every one, nevertheless it is acknowledged on all sides to be far ahead in practical utility to any other Pharmacopœia extant.

Many changes in nomenclature have been introduced, thus the Latin names of alkaloids have been made to terminate in *ina*, as for instance morphina, quinina, etc. So-called neutral principles have been made to terminate in *inum*, as santoninum. The English names being morphine, quinine, etc., for alkaloids, and santonin, etc., in the case of neutral principles. Alumen denotes the sulphate of aluminium and potassium, instead of the sulphate of aluminium and ammonium; chirata, asafœtida, cambogia, for chiretta, assafœtida, gambogia, sulphidum for sulphuretum; manganum for manganesium, etc. Some of these changes appear at first sight frivolous, but doubtless the revisers had good reason for their action.

The substitution of parts by weight for the actual weights and measures has been carried out, and will save a good deal of trouble to manufacturing pharmacists. Formulæ for pills and lozenges are given in grains and grammes.

There have been 229 substances dismissed which were official in the Pharmacopœia of 1870, while the number added amounts to 256. Among the pharmaceutical preparations added may be mentioned 11 abstracts, 10 solid extracts, 35 fluid extracts, 11 syrups, 22 tinctures and 6 wines.

The absence of doses to all the official preparations appears to be the worst feature of the book, and it will to a great extent prevent that supervision or checking of doses in prescriptions by the pharmacist, which was undoubtedly a great protection to the physician.

The tests of purity, detection of adulterants and physical properties of drugs are given with great minuteness of detail, and are evidently the work of certain well-known pharmacists on the Committee.

A change which has taken place, and which it would be as well to bear in mind, is in Ext. Aconite. The new extract is prepared from aconite root, while the extract of the Pharmacopœia of 1870 was made from the leaves. The strength of the former is stated on good authority to be about nine times that of the latter. In the same way conium seed has taken the place of the leaves in all preparations of the drug. The dose of Laudanum of the new Pharmacopœia, judging by the formula, will be about 20 drops, while that of 1870 was 30 drops. Castoreum may be mentioned as one of the drugs of animal origin dropped from the Pharmacopœia. Castoreum is very largely used, especially by country practitioners in this Province. Ointments are still made with lard as their base, benzoated lard being ordered in most cases. Other ointments, such as carbolic acid ointment, have Unguentum as a base. Unguentum being composed of 80 parts of lard and 20 parts of yellow wax. A new base for ointments under the name of Petrolatum is introduced, but its use is left to the judgment of the prescriber.

We may return again to an analysis of the new United States Pharmacopœia and some of the new preparations contained therein, meantime we would say that the book as a whole is a great stride in advance. Fluid extracts have been brought almost to perfection. The new line of preparations called abstracta will be a great assistance in pill making, besides being more exact than the old solid extracts. It is easy to be hypercritical and find fault, it is not quite so easy to revise and republish a Pharmacopœia. Every professor of Materia Medica and every manufacturing pharmacist will doubtless find something to say in the way of criticism, forgetting perhaps that they were invited to make their suggestions to the revisers long before the book was published.

The Compend of Anatomy, for use in the Dissecting Room, and in preparing for examinations. By JOHN B. ROBERTS, A.M., M.D., Lecturer on Anatomy in the Philadelphia School of Anatomy. Third edition. Philadelphia: G. C. Roberts & Co., publishers, 1882.

This little book seems to be admirably arranged, so as to give the most information in the least possible compass. We cannot say more in its favor, for this is precisely what it aims to do, and we think that its author has succeeded.

Essentials of Vaccination, a compilation of facts relating to Vaccine Inoculation and its influence in the Prevention of Small-Pox. By W. A. HARDAWAY, M.D., Professor of Diseases of the Skin in the Postgraduate Faculty of the Missouri Medical College. Chicago: Jansen, McClurg & Co., 1882.

Any one wishing to post himself thoroughly in all the facts concerning vaccination cannot do better than purchase this little volume. It is well

and concisely written, and brings its information down to date. The objections to vaccination are discussed, and very plainly shown to have no foundation in fact.

The Planet, a monthly Journal of Medicine, Surgery and the Collateral Sciences, Dr. C. E. Nelson, New York, editor and proprietor.

Our friend Dr. Nelson has entered upon the field of Medical Journalism, and he has our heartiest good wishes for his success. His *Planet* is not a large one, but we fear that his programme—a portion of it at least—will soon give him no end of trouble. He promises to accept all that is sent to him in the way of original communications—"No rejections." This is the height of good nature, but we seriously question its wisdom. Dr. Nelson is a pithy writer, and will give his readers common sense views on the Medical questions of the day.

Scrofula and its Gland Diseases. By FREDERICK TREVES, F.R.C.S., Eng. Philadelphia: Henry C. Lea's Son & Co., 1883.

But little has been written on the subject of Scrofulosis for several years, so that this little work of about one hundred pages should receive some attention at the hands of the profession. While its author has derived some of the material from the German and French schools, the greater part is the result of his own investigations. It is issued in paper cover at the very low rate of 10 cents, so that on the score of expense no one can object to purchase it.

THE DURATION OF ISOLATION OF SUBJECTS OF CONTAGIOUS DISEASES.

M. Hillairet, in the name of a commission composed of MM. H. Rodger, Bergeron and Hillairet, read before the Académie de Médicine a report in reply to the inquiry addressed to the Academy by the Minister of Public Instruction, as to how long a pupil affected with a contagious disease should be kept away from school.

The report considered the following diseases: varicella, variola, scarlatina, rubeola, mumps, and diphtheria, and the conclusions are as follows:

Varicella, whose progress is often irregular, may require ten to twelve days for the fall of the crusts: The isolation should be about twenty-five days.

Variola has a prodromic period of three to four days; four or five days of eruption; three or four days of suppuration; desiccation requires three days; fall of the crusts, six days. Then comes a period of furfuraceous desquamation without definite limit. Isolation should not be less than forty days.

In scarlatina the period of invasion occupies from six to forty-eight hours, or exceptionally three days; the eruption is completed in from five to eight days; desquamation commences on the fourteenth or fifteenth day, and lasts from fifteen to twenty-six days. Isolation should last forty days.

Rubeola has a prodromic period of three to four days; exceptionally from six to eight, or even twelve days; the eruption is completed in twelve or forty-eight hours, then it declines for twenty-four hours; desquamation lasts from eight to fifteen days. Isolation for forty days will be sufficient.

Mumps, as a rule, has a duration in ordinary cases of six days; convalescence lasts from six to seven days. If any complication of metastasis occurs, it lasts usually about nine days. Isolation for twenty-five days is sufficient.

The duration of diphtheria is very variable, but isolation should be maintained for at least forty days.

The Commission consequently proposes the adoption of the following measures:

1. Pupils affected with chicken-pox, small-pox, scarlet fever, measles, mumps, or diphtheria, should be strictly isolated from their comrades.

2. For small-pox, scarlet fever, measles, and diphtheria, isolation should not be shorter than forty days; for chicken-pox and mumps, twenty-five days is enough.

3. Isolation should last until after the patient has been bathed.

4. The clothing worn by the patient at the time he was taken sick should be subjected to a temperature of 90° C. [194° Fahr.], and to sulphur vapor and then well scoured.

5. The bedding, curtains, and furniture of the sick-room should be thoroughly disinfected, washed and aired.

6. The pupil of a school, after recovery from one of the above contagious diseases, should not be readmitted to the school unless furnished with the certificate of a physician that the above precautions have been observed.

These conclusions were adopted by the Academy.—*Gaz. Méd. de Paris.*

THE CANADA MEDICAL RECORD.

VOL. XI. MONTREAL, MARCH, 1883. No. 6

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ON THE TREATMENT

OF THE

COMMONER FORMS OF SKIN DISEASES.

BY

J. LESLIE FOLEY, M.D., C.M., L.R.C.P., London, Assistant Demonstrator of Anatomy, Faculty of Medicine, Bishop's College, Attending Physician to the Montreal Dispensary.

To arrive at a correct diagnosis in a case of skin disease is sometimes a difficult object to attain; to effect a cure is even more puzzling and annoying. Who has not had his professional vanity sadly tried by an obstinate case of tinea tonsurans, acne, or eczema, after running through the whole armamentarium of the Pharmacopœia only to find that it still persists. Having had ample opportunity of sitting at the feet of such Gamaliels and lions on skin as Jonathan Hutchison, Living, Malcom Morris, Sangster and Stephen Mackenzie, and carefully noted their line of treatment, I have ventured to throw together in simple outline some remarks as to the best method of combating the more common forms of these diseases. And, first, eczema: In acute eczema the best local application is lotio plumbi applied on lint, the lint being kept continually moist. Dusting powders, such as oxide of zinc and starch, will also be found useful, and a lotion of carbolic acid (1 in 40) will relieve the itching.

Chronic Eczema.—Carbolic acid here, as in the acute stage, is one of the most useful remedies. It may be applied in the form of either a lotion or ointment x to xv gr. ad. ℥i of the ointment. Thymol, highly recommended by Dr. Crocker of London, in the strength of v to xx gr. ad. ℥i, might be tried. Similar in effect to carbolic acid are the preparations of tar, which are the most serviceable of all external remedies. To obtain good results they should be handled with care; unless used at the proper time, and of suitable strength, they serve only to irritate, and when this occurs they should be abandoned at once. Tar is of most benefit when the disease has reached the chronic stage. It should never be used in the acute. If there be much swelling and inflammation it likewise should be withheld. Ointments of varying strengths are the most suitable means of applying tar, for in addition to the stimulating effect of the remedy an emollient effect is obtained. The ointment should not be too strong—from i to ii ʒ ad. ℥i is usually sufficient. The two forms of tar commonly used are the pix liquida and oleum cadinum.

℞ Olei Cadini..... ʒ iss.
Cerati Simplici.....i.
Olei Amygdalæ Amar.....ggt vi.
M. Ft. ungt.

This makes one of the most elegant tarry preparations. But there is another preparation of tar which, although known to the profession in this country, is not so well known as it deserves to be—

I refer to the liquor carbonis detergens. It is a saturated alcoholic solution of coal tar, and made by Wright & Co., of London, and J. P. Remington of Philadelphia, and may be had at Kenneth Campbell's. It is in great repute in England, and yields most beneficial results. The ointments which are most generally used in the treatment of chronic eczema in the London hospitals are the ungt. petrolei co., and the nitrate of mercury ointment. Both are excellent. The following is the formula for the ungt. petrolei co. :

℞ Liq. Carbonis Deterg..... ʒ ss.
Hyd. Am. Chlor.....gr. x.
Vaseline ..... ℥ i.
M. Ft. ungt.

If the skin is greatly infiltrated, or the epidermis much thickened,solutions of potassa fusa used with excellent results, v gr. ad. ℥ i usually sufficient. When the eczema consists of very chronic, dry small patches the best treatment is to blister with acetum cantharides or the liq. epispasticus. Professor Hebra's treatment will succeed some times when other treatment fails. It is of especial service in chronic eczema of the leg. It consists in the application of sapo viradis, followed by the immediate use of an oily ointment. The ointment used in preference by him being the ungt. diachyli. A small lump of the soap, the size of a nut, is smeared upon a piece of flannel. This is to be applied directly to the patch of disease and rubbed firmly, and with moderate pressure, upon the skin until all traces of the soap disappears. The piece of flannel is now dipped into warm water and again applied in the same manner to the part, when an abundant lather will be formed. More water is added from time to time until copious suds cover the skin, when with clean water the diseased surface is thoroughly washed off, freed from all signs of soap, and carefully dried with a soft cloth or towel. The rubbing should be kept up in mild cases from five to ten minutes, in severe to about twenty minutes. The first application should always be somewhat moderate that too great a destruction of epidermis be not produced. The sensations of the patient will always serve as a guide to this point. The application is not painful, as might be supposed, but, on the contrary, agreeable, and relieves the itching ; as a rule, it at once affords ease to the patient. The skin immediately after the washing presents a red and angry appearance, and is now ready for the ointment ; this is spread on strips or pieces of soft flexible muslin. It is well not to make one large piece cover the whole, but it is preferable to have several pieces, in order that they may be the better adapted to the skin. The ointment should be spread thickly on the rags, finally the part should have outside cloths applied to prevent the oil from oozing through, and be bound down by a bandage. The bandage is a matter of moment, for its proper application contributes materially to the success of the treatment. It is essential that the ointment be brought in close contact with the skin and kept in position. The entire operation should be repeated twice daily, morning and evening.

Eczema of Hands.—Hands should be protected from all irritating influences ; they should be kept out of water, and free use of soap prohibited, exposure to heat also avoided. Rubber gloves will be found useful. In the majority of cases stimulating ointments most useful, as calomel or boracic ointment.

Eczema of Nipple.—Best treated with sapo viradis and ungt. diachyli. Application of nitrate of silver xx gr. ad. ℥ i highly spoken of by Living.

Eczema of Beard.—Crusts removed by oil and poultice, hair cut away or shaved off ; apply ungt. petrolei co. In chronic stage use stimulating ointments.

Eczema of Eyelids.—In mild cases apply nitrate of mercury ointment ; in severe cases pull out eyelashes, and touch edges with solution of potassa in water, x gr. ad. ℥ i (McCaul Anderson). The alkali should be immediately neutralized with dilute acetic acid. Operation repeated every few days, after which nitrate of mercury ointment applied.

Eczema of Leg.—In cases of moist eczema the most successful treatment is that with sapo viradis and ungt. diachyli. The limb should be carefully bandaged, and when eczema is associated with varicose veins Dr. Martin's elastic bandage should be applied. Squire, of London, recommends the glycerole of the subacetate of lead, xv to xxx gr. ad. ℥ i, in these cases.

Eczema Intertrigo.—Dusting powders of oxide of zinc and starch with or without calomel used. Ungt. zinzi one of the best applications. Parts should be seldom washed.

Eczema of the Genitals.—Sapo viradis and ungt. diachyli ; in acute stage lotio nigra followed by ungt. zinci and calomel. Carbolic

acid x gr. ad. ʒ i, useful. Thymol also useful' Painting the part with tr. iodini sometimes serviceable.

Eczema of Head.—After the crusts have been removed by poulticing the best application is the ungt. hydr. nit. In all cases of eczema the ordinary washing with soap and water must be forbidden, and this is especially the case when the delicate and healthy new cuticle is forming, for then water macerates and destroys it, and thus the duration of the disease is needlessly prolonged. While the local treatment is of paramount importance in eczema, the constitutional is not to be neglected; arsenic should be given and tonics of of iron, quinine, etc., administered.

Psoriasis.—When the psoriasis covers the whole trunk, or is nearly universal, the best treatment is by alkaline warm baths. Pot. carb. ʒ ii to ʒ iii should be added to an ordinary bath. The patient should remain in the bath for at least an hour and a half daily to do any good. The best time for taking the bath is shortly before going to bed, to avoid dressing again. The temperature of the bath should be 90° to 98°. After coming out of the bath the patient should be rubbed and anointed with vaseline, which should afterwards be wiped off. When psoriasis attacks a leg, or a not too extensive surface of the body, then the tarry preparations and chrysophanic acid will be found most beneficial. Of the two I prefer the application of tar; it may be applied either as an ointment or lotion, the latter most satisfactory; it dries quickly, and does not easily rub off on to the clothes. My treatment would be to paint the liq. carb deterg. with a camel's-hair brush over the part affected two or three times a day. Chrysophanic acid has certainly yielded splendid results, and is much more active than tar; but it has a great many disadvantages, as setting up inflammation, staining clothes and hair, etc. It is used in the strength of ʒ i ad. ʒ i of vaseline. Pyrogallic acid xxx gr. ad. ʒ i is useful, and less open to the objections of the former. In dealing with psoriasis of the scalp the free use of soap or spirits of soap is very good, followed by the liq. carb. Deterg. or the red or white precipitate ointments diluted with vaseline. In the chronic spots of psoriasis, about the knees, the same treatment is excellent. Obstinate cases of psoriasis often yield to the tinct. saponis viradis c. pce, which consists of equal parts of pix liquida alcohol and sapo viradis. Sulphuret of calcium has been highly recommended in these cases. The following is a good formula.

℞ Calcis ..... ʒ ss.
Sulphuris Sublimati..... ʒ i.
Aquæ ..... ʒ x. M

In the constitutional treatment arsenic and tonics should be given, and always remember the possibility of the gouty and scrofulous diathesis. I have seen cases of psoriasis rebellious to all local treatment yield like a charm to vin. colchici. I need not say that the patients in these cases were gouty.

Scabies.—Sulphur ointment, half the strength of the Pharmacopœia ointment, is the remedy which you will find do the most good. The best time to use it is at night. Give it with the following directions: To be rubbed all over the body, with the exception of the head, and especially on the hands, buttock and lower part of the abdomen; and the underclothing used during the previous day, as socks, gloves, drawers and jersey should be worn during the night. This thoroughly disinfects the clothes, at the same time keeping the ointment well applied. In the morning a warm bath should be taken. The process should be repeated for three nights, and subsequently the ointment should be rubbed on the hands, wrists and buttocks for a few nights. When you are confronted with a case which you have had under treatment. but are not certain whether it is cured or not, you will find an ointment of bal. of Peru (ʒ ii ad ʒ i) an excellent application. It does not irritate or annoy the patient.

Tinea Tonsurans. — In mild cases painting the part with tr. iod., and afterwards apply an ointment made with hydr. ammon. xx gr. ad ʒ i will be all that is necessary. In more severe cases the oleate of mercury ointment, 10 per cent. solution made by rubbing x gr. of freshly precipitated yellow oxide of mercury with xc gr. of oleic acid until dissolved, is one of the very best applications. A point of some moment, which I have often heard Dr. Living of London lay stress upon in his clinique, is to order the patient to have the head smeared over with carbolized glycerine in order to prevent the disease spreading to others. Dr. Alder Smith recommends equal parts of carbolic acid, citrine ointment and sulphur ointment as very effectual. If the disease is in an early stage, and consists of one or two circumscribed spots, the best plan is to

cut the hair short all around the spots, and apply with brush Coster's paste, which consists of:

℞ Tr. Iodii. ..... ʒ ii.
Ol Picis..... ʒ i. M.

Lichen.—The remedy *par excellence* is arsenic internally—Fowler's solution most commonly used. Some soothing lotion should be used externally such as the appended:

℞ Sodæ Biborate..... .....
Sodæ Bicarb.....aa ʒ ii.
Acid Hydrocyan. dil..... ʒ i.
Glycerine..... ʒ ii.
Aquæ ad..... ℥ viss. M.

Hutchison says in lichen planus start with liq. sodæ arsenitis, but if it does not get better give liq. arsenicalis, or both combined.

Acne.—You will find the following treatment of acne to be the most satisfactory. The face should be steamed every night by holding it over a basin of hot water for a few minutes. The skin should be then well rubbed for five or six minutes with soap and flannel, or a soft nail brush may be used with advantage when the skin will bear it; the soap should then be sponged off with warm water. When the face has been dried the following lotion should be applied, and allowed to dry and remain on all night:

℞ Sulphur precip..... ʒ ii.
Glycerini..... ʒ ii.
Spt. Vini..... ..... ℥ i.
Aquæ Calcis.....
Aquæ Rosæ.....aa ℥ iii. M.

In inveterate cases of acne the following will be found particularly serviceable:

℞ Sapo Mollis..... ℥ i.
Spt. Rectificate..... ℥ iss.
Ol. Levandulæ.....M xx.
Aquæ ad..... ℥ vi. M.
Ft. Lot

The lotion should be applied with a piece of flannel and vigorously rubbed on the skin. It should be washed off and then the sulphured lotion applied. In treating diseases of the skin one should always bear in mind the late Professor Hebra's admirable advice: whatever course be adopted, constancy and perseverance are of the utmost importance. He who is always changing his plan of treatment is sure not to attain his object so quickly as one who steadily and patiently applies whatever remedy seems best suited to his case.

INSANITY.

By James T. Steeves, M.D.
Medical Supt. of the New Brunswick Lunatic Asylum.

(*The Annual Address, delivered before the New Brunswick Medical Society at St. John, N.B., July* 18, 1882.)

Gentlemen of the New Brunswick Medical Society,—In accordance with a time-honored custom which prevails in medical and other associations, for the President to deliver an annual address, suited to the aims and object of the association, I propose to present for your consideration a few thoughts connected with the great subject of insanity. Before proceeding upon this theme, permit me to thank you for the honor which you were pleased to confer in electing me the first President of your distinguished body. I regret that I am not able to bring to the discharge of the tasks involved in the acceptance of the presidency that ability and eloquence which the position demands, nor that learning and efficiency which distinguishes gentlemen before me, who will in the future grace this chair. In choosing a subject to bring before you on this occasion, it seems to me fitting that I should select the one which of late has been principally my study and practice, which has largely occupied my thoughts, and therefore the one upon which I may be able to refresh your memories, or perchance offer you a few hints. It is proposed to consider briefly the prominent causes which produce neurotic disease and develop insanity: following this will be allusions to the question so earnestly asked, Is insanity on the increase? Also, what are the relations of civilization to insanity? and lastly, a word upon the question of prevention.

The subject of insanity at the present time, whilst it is receiving very much greater attention from the medical profession than in the past, is also one in which the general public are manifesting a deep interest. Legislators, philanthropists, metaphysicians and lawyers all from their various standpoints have their minds forcibly drawn to its consideration, and take a keen interest in the questions so constantly presenting themselves in connection with the developments of this intricate disease. The ingenuity of man has taxed itself in vain to frame a definition wholly acceptable—that will comprehend all, but nothing more and nothing less than that which we understand by the word insanity. Happily for our purposes, an exact definition is not necessary. During the past year we have had, both in America and Europe,

ample proof of the attention and interest which the subject evokes from all classes, on account of its medico-legal aspect. And we have also exhibited to us the appalling fact that, in many vastly important cases, it is impossible to prove whether men are insane or not. There is no reasonable doubt that criminals, instead of suffering the punishment due to their crimes, have, in many instances, been sent to lunatic asylums, and on the other hand, in many other instances, insane persons who were really irresponsible for their actions have suffered the penalty due only to the worst criminals.

CAUSES OF INSANITY.

In approaching our subject we may say boldly that, towering above all other causes, stands intoxication; no matter what poisonous substance may be employed, the issue is the same. If the action of alcohol and kindred stimulants were confined to those individuals who indulge in its use, it would not be a matter of so great moment; but all around them must suffer the consequences. And the effects do not cease here. Unfortunately for society, they pass on to succeeding generations unless by an interposition of Providence others do not come. And we find that the subjects of intoxication and vice are excluded in this life from the kingdom of health; and in the life to come, they are shut out of the kingdom of heaven. In view of its bearing upon the question of the increase of insanity, and of the relation of civilization thereto, it is proposed to consider, as near as we may, how far this cause was operative in producing insanity in the earlier ages of mankind. It is certain that at a very early period, even among savages, intoxicants were employed. In India the aboriginal tribes performed their religious rites and observances whilst in a state of intoxication. The West Indians at the time of Columbus brought about a state of intoxication by means of a powder which they snuffed into the nostrils. The California Indians and the Brazilians also used the product of narcotic plants for the same purpose, the object being chiefly to produce a sort of ecstatic state for oracular and visionary purposes. The Peruvian and Mexican priests followed the same practices with like objects. Captain Cook relates a practice among the South Sea Islanders of preparing an intoxicating liquor frem the roots of a plant. Of this they drank somewhat sparingly; and the effects described by Cook appear to have been the same as that which wine produces upon us. It is claimed that the North American Indian—our noble Lo! had no "fire-water" until introduced by his civilized brother. It is more than probable that among uncivilized people who indulged in practices of inebriety the same results followed which we observe to-day in civilized nations, modified doubtless by the absence of certain of the immoral and licentious habits which are indulged in by a portion of the drunken civilized races. Few facts are better known at the present day than that children procreated during alcoholic excess are frequently imbecile, hydrocephalic, or inherit some neurotic defect.

DRUNKENNESS IN ANCIENT TIMES.

Among the ancient Jews we find that this potent cause of insanity—intoxication—was not unknown. And we are informed on excellent authority that the fruit of the vine, the same vine which we believe produces the wine of the present day, was used as far back as the time of the flood. About this period a famous postdiluvian planted a vineyard, manufactured a wine that intoxicated, drank to excess himself, and while in that state procreated—and that consanguineously, thus adding another of the causes which at this day takes a front rank. Further proof of the indulgence in strong drink among the Jews from the same authority may be readily adduced in the case of the young man who was brought to the elders to be stoned for his gluttony and drunkenness; the suspicion of Eli in the case of Hannah; the instance of David simulating a drunken man by his staggering walk. Isaiah also shows a familiarity with the primary effects of strong drink when he uses the simile: "As a drunken man staggereth in his vomit;" and in his allusion to their vociferating in song and revelry Joel says, "Awake ye drunkards, weep and howl." From these facts it is evident that this people indulged in intemperate and drunken habits; and though the proof of the prevalence of mental disease is not so near at hand as that the most potent of causes were present, yet the conclusion that neurotic and psychological diseases to some extent prevailed appears inevitable. The ancient Egyptians, long before Joseph was arrayed in fine linen, and had a gold chain about his neck, were a luxurious and profligate people. The splendid works of art, their inventions, and the beautiful products of their manufactories attest unmistakably their claims to an

advanced state of civilization. Drunkenness and allied indulgence among both sexes are notably facts of history. The history of Greece teaches us that the early Greeks were a hardy, robust people; even their rulers did not disdain manual work. Later, however, as we well know, they became he most refined and cultivated people on the earth. Luxury and profligacy followed, and their opposites, and sure accompaniments, poverty and misery. The Greeks were not, perhaps, drunkards, though they indulged pretty freely in the wine-cup. Dyonysius was an inebriate, because we are told that his paroxysms, at times, extended over three months; and we read also that his sons inherited the same lust, and indulged it freely. Plato advocated teetotalism for boys under eighteen years old, moderate drinking between that age and forty, and abundance of wine in advanced years, so that from its social and exhilarating effects the aged might feel young again. A famous Grecian lawgiver advocated that a double punishment should entail for a crime committed through drunkenness. Bacchus is represented by a Greek writer as saying that the eighth cup of wine brings the constable: the ninth, black gall and hatred, while the tenth brings madness. The following epitaph goes to prove that the same results which follow intoxication in modern times did also in ancient, viz.:—

"This is the monument of that great drinker, Arcadian and known traveller. The man did die from drinking strong wine in too large a cup."

We are forced to the conclusion that these people could not escape insanity in some form in view of the similarity of their customs to those of modern society.

The early Romans, like the early Grecians, were a hardy race, simple in their habits, and, therefore, not conditioned to develop nervous affections. But, at a later period, and as Imperial Rome, we find the same luxuriousness and profligacy rampant that characterized Greece, and which, indeed, the former inherited from the latter. Seneca allowed that men might get drunk to ease the mind of a great corroding care. Both of the Catos indulged in wine to the extent of drunkenness. And in the Bacchanalian rites of the Romans there was associated debaucheries of the worst kind. To think everything lawful was the grand principle of their religion. Men and women engaged in these orgies. Night was rendered hideous by the noise and horrid yells of these revelers, driven frantic by wine. Such excesses could not fail of producing the madness of insanity. Coming to the subject of intoxication among modern civilized nations and peoples, we need no argument to prove the prevalence of the custom, nor to prove that in its primary and secondary effects we have the chief cause of our poverty, disease and degeneracy. And we may add with emphasis that the worst of diseases, viz., insanity, if not its first-born, is its favorite offspring.

We turn now to the consideration of other causes, and, as in the treatment of the first cause, we shall endeavor to ascertain to what extent these existed in ancient times.

DEFECTIVE NOURISHMENT.

Second in importance among causes of insanity is mal-nutrition. Under this head we may comprehend defective nourishment, bad sanitary arrangements, transmission through hereditary descent, and the effects of inter-marriage. Under these influences the bodily organs become depressed, and sooner or later, perhaps insidiously, disease supervenes. The standard upon which health depends is disturbed, and degeneracy of the race follows. The nervous centres fail to receive that nutrition which they require, and the mental faculties lose their integrity. The converse of the Latin expression (*mens sana in corpore sano*) is contemplated by its oft quotation. Among savage tribes and nations these causes were not sufficiently operative to cause nervous and mental ailments. That form of poverty with squalor and overcrowding with which we are familiar was scarcely known to primitive man. Hunger they must have felt keenly at times, but this would only be for a short period. The testimony of travellers goes to show that but few insane are seen among savage tribes. I am aware that this testimony is not conclusive. We know that not many years have elapsed since the castration of epileptics was practiced in Scotland, and it is highly probable that savages would devise some summary means to dispose of their oblique brethren. Prehistoric people must have practiced endogamy to some extent, and thus taken a step toward degeneracy. It would appear, however, that at a very early period in the history of man he learned, or at least he became possessed of the desire to marry strangers rather than relatives, and it is said that among some it was considered an abomination to marry even in their own tribe. The question

of consanguineous marriages as it relates to degeneracy and disease is by no means settled. It is *sub judice*. Experiments upon animals tend rather to show the harmlessness of endogamy. Statistics upon the questions are conflicting, in fact they are untrustworthy, because often obtained for controversial purposes. For instance should a statistician select cases where heredity existed, or where there was a chance accumulation of idiosyncracy and intermarriage combined, much material from such cases might be drawn to prove the theory. We must say, however, that so far as our own observation has extended it has strongly tended to establish the belief that intermarriage in the human animal is damaging to both his body and mind, but not necessarily so. What we mean by this will be understood when we remark that inbreeding in the case of the lower animals is done under professional and scientific guidance, whereas in the animal possessing reason, mostly nothing more than a sort of abnormal affinity operates in the choice of a subject for the experiment. Among the ancient Jews we have no reason to believe that there was great suffering from the causes under consideration. We, however, have holy writ for the authority, "that the poor should never cease out of the land," and we have them repeatedly mentioned in the Jewish writings. The mode of living, and the surrounding conditions that appertained during the lives of the patriarchs, were much less complete than at the present time, and yet we find the evidences of art and learning present. And at a period a little later a development of luxurious living which could scarcely have been free from the attendant vices. The splendors of Egypt and her eternal monuments were produced through a system of grinding among the common people worse than slavery. The miseries and hardships which Egyptians of the lower classes endured—being often, as they were, driven to their labors and into the mines under the lash by brutal soldiers, could not fail to produce degradation and disease and madness. But under such a condition of things no friendly asylum would be open to receive them, and no statistician would record their admission, recovery or death. In Grecian history there does not appear to have been any period when there existed, side by side with wealth and luxury, great poverty, hardship and degradation such as we find under civilization at the present age but that pauperism did, to an appreciable extent, exist there can be no doubt. The Romans certainly were not free from the effects of malnutrition. Under the iron hoof of taxation and oppression poverty and misery prevailed. It is true that Roman temples and palaces were abundant and magnificent, but these, as the Roman poets were wont to show, served to mark in bold contrast the extremes of luxury and poverty.

MORAL CAUSES.

Under this head we shall consider the moral causes—those that act upon the emotions, which may include such as excite and depress, as may be observed in false views of religion, in sorrow, losses, disappointments and over-anxiety. Following the same course as in treating other causes, we may inquire to what extent these existed in the distant past. Savages are not greatly affected by their emotions of love, nor would we expect among them excitement of a political or religious character. Neither would they be likely to come to grief from speculation in stocks. But whilst theology and æsthetics might not jar our brethren of the Drift period, it is certain they were not free from affective impulses, such as might upset and overturn their heads. Their strong belief in ghosts and demons, and their fears therewith, are well known; and from their fits of rage and jealousy and club battles, we may conclude that their heads were not free from disturbance. The Jews suffered losses and estrangements; they were captives in a foreign land, and hung their harps upon the willows but they were mostly sound and well grounded in their religion, and on the whole not greatly moved in their affective natures. Our third class of causes would not touch the Hebrew people but feebly, compared with its grasp upon modern society. The Egyptians were divided into two great castes—the government, priests and military, and the slaves—and these continued from generation to generation. No great and sudden change in their affairs was likely to occur that would stir the emotional nature. In fact immutability was stamped upon everything Egyptian to an extent scarcely found elsewhere, and it characterizes the subjects of the Khedive to-day. Causes of insanity of a moral character, in a much greater degree, existed among the Greeks than the Egyptians. They, the Greeks, were a warlike as well as a poetic people and over a large portion of their history had the elements of excitement and emotion. It is true that at a period the theory "that the rule of many is not a good thing" prevailed, but for a much great-

er period, if there was not a fostering of the conditions for individual thought, these conditions did supervene, and the various and divergent questions that arose among the rival cities served to engender much emotion and energy. Speculative thought upon subjects of religion and philosophy carried men's minds into depths and mazes far beyond the limit of healthful influence. Licentiousness existed to an extent sufficient to disturb mental evenness, and domestic peace was often perturbed by unfaithfulness. A Greck historian (Mahaffy) is bold enough to say that the Homeric lady was the property of the stranger. Moral causes had but little effect in producing disease of any sort among the primitive Romans, but as they advanced in civilization and luxury and their accompaniments, we find all the conditions that are so operative to-day. Juvenal says:—

> "Nothing is left, nothing for future times
> To add to the full catalogue of crimes—
> Vice has attained its zenith."

During a long period in Roman history the people did not merely yield to sensual pleasures, but they cultivated sensuality in every way; they sat in the lap of luxury, and their children crept upon purple. It was said of the youth that they did not imbibe their principles and practice of immorality and licentiousness from the schools, but they carried them into the schools; and that these vices were woven into their habits and very nature, from observing shameless practices and hearing obscene language at home from their parents. Such a state of society, and of mental life, could not fail to furnish the emotional factors of mental disease.

The next and last cause to which we shall direct your attention is Intellectual Tension. This important factor in the production of insanity, at the present time, has not attained that prominence which other causes have, because it does not so frequently appear as the immediate exciting one. The active civilized races of the world have awoke to a realization of the fact that life is short, and that they must rush on to the end of the journey with high-pressure speed. Education must be obtained in all the branches simultaneously by a system of cramming, which taxes the memory and confuses the mind beyond endurance. For a moment we may consider the operation of this cause of disease upon the people of ancient times. It is quite certain that savages lose no sleep through hasty development of the intellectual faculties, nor do they resort to suicide as a remedy for failure in competitive examinations for honors. The Jews were forty years in making their flight from Egypt to Canaan. It is true they were led by a circuitous way, following a pillar of cloud by day and a pillar of fire by night. But a lesson of patience and deliberation was learned that would require ages to unlearn. Literary work, however, of a laborious kind was performed by the Jews. The book of Job and the Psalms in a literary point of view, requiring as they did, on the part of the authors, an extensive knowledge of the laws of nature and of science, command our utmost admiration, and would immortalize the names of their authors if produced within this century. Paul was told that much learning had made him mad. The Egyptian products of intellectual works in books were very great. Their advancement in the sciences was not reached without much brain exercise. Some sleepless nights doubtlessly they suffered, but it is not probable the mental strain, in their case, acted appreciably in causing insanity. In the early part of Grecian history there could have been done no considerable amount of harm from intellectual tension. But later, brain work of a painstaking and laborious, if not a competitive character, was not infrequent among the literary and philosophical classes. History informs us that the children were thrashed if they made mistakes during recitations, and that discipline was sharp and exacting. Strange enough, girls, and even ladies of rank, were very imperfectly educated. A high state of culture mostly contemplates aching heads, and no doubt the Grecian literateurs and philosophers tasted the bitter fruit of mental toil—this, however, was limited to so small a class comparatively that no marked effect would be observed. It would appear from Roman history that as the people advanced in the arts, and in learning, the subject of education was one that early engaged the attention of their public men. The range of studies, however, must have been very limited when compared with the present; notwithstanding this limitation, fears were entertained lest the boys should suffer the ill effects of over-study. It was argued upon the one side that studies having different tendencies forced upon the mind at one time would injure the understanding and the body; and upon the other that there would be no ill results follow, that the mind was capable of great healthy expansion, and that boys especially did not suffer from mental labor. We may fairly conclude that the Latins did not suffer

seriously from over-study, sleepless nights and severe competitive examinations, nor from the other intellectual causes of insanity.

Alluding to competitive examinations in the higher branches of learning, it must be seen clearly by all interested in the subject that some change in the system should be made. In London alone, in one year, ten cases of madness ending in suicide occurred. The distraction and serious damage, in these cases, result from multiplicity and complexness of studies. In contemplating this subject, we must bear in mind that the final factor in accomplishing the end may not have played the most important part. The fruitage may have been, in part, from the planting of a grandparent. Ancestral errors have more to do with our condition and diseases than is apparent at first sight. Then the moral or emotional etiological element has much to do with the result. There is, perhaps, a consciousness on the part of the student that at home is waiting, in breathless anxiety, a sister, a mother or a father who is to be established or wrecked by the issue in question.

In reviewing our hasty glance upon the condition, mental and otherwise, of ancient nations, and upon the prevalence of the causes of insanity among them, we may conclude that, among savage tribes and primitive nations, the elements for the development of mental disease were mostly absent. As the nations advanced in civilization, wealth and luxury, with their sure accompaniments, profligacy, intemperance and poverty, we have the grand and salient causes of psychological disease in operation ; logically we can arrive at no other conclusion than that they resulted as do the same causes to-day. Among the nations of antiquity, however, it was quite impossible that insanity could occur so frequently as in the present age, or that the insane could, to any considerable extent, accumulate in a nation. It must be observed that accumulating and occurring cases of insanity are separate questions. Returning to the latter subject, let us notice that modern civilized nations, through their humane and benevolent institutions, foster both the occurring and accumulation of insanity. Instead of allowing them to perish, the disease is propagated by the beneficent care that is taken of the poor, and those of feeble mind who are ready to become insane, both before they are placed under restraint and after they have apparently recovered. Among the ancients those that were mentally feeble perished by the way. The morally insane, after a short exhibition of their characteristic symptoms, were stoned to death or otherwise summarily disposed of. The homicidal killed and were killed in turn. In Rome defective children were cast down the Tarpiean Rock. And thus there was much less transmission of disease and degeneracy to succeeding generations. In coming specially to the subject of the increase of the insane population of our time, it must be admitted that the accumulation of late years has been very considerable, but we are not prepared to endorse the statement, boldly made, that there is a large increase in the occurring causes. Taking the statistics of our own asylum, we find that the admissions in 1854 were in numbers as great as in 1881, and that in the three decades intervening there has been no considerable change. The number of admissions is a fair proximate estimate of the occurring cases. We find a different showing when we take the figures representing the number remaining at the end of the year. In 1854 the number was 131, and in 1881 it was 325. So in the daily average in 1854 it was 131, but these numbers have accumulated from year to year, until in 1881 the average was 316. Looking at the statistics of English and American asylums, one is appalled by the increase of the figures from time to time. In England in 1807 it was reported to Parliament that the poor insane, amounted to 1,765 ; again, in 1827, that there were 9,000 ; in 1842, 13,868 ; in 1860, 33,000 ; in 1870, 48,433—later still, 60,000. This large increase of figures was due to Acts of Parliament, compelling the searching up of these people and registering them, but had no near relation to the increase of occurring insanity in England. Under the excellent system of providing for, and owing to the good care taken of the insane to-day, the mortality is very low compared with the distant past ; not a great percentage is permanently restored ; so it is found that the deaths and recoveries are less numerous than the admissions—hence the accumulation. English statistics show but a very small increase of occurring insanity, and the same is true of other countries. The relations of civilization to insanity have been incidentally referred to from the beginning of this paper. A few words will therefore suffice to complete what I have to say. It might be well, in the first place, to attempt to define what civilization is. Ideal civilization is a well-ordered state of society, consisting in the progressive improvement of the

society, considered as a whole and of all the individual members of which it is composed. Such a definition contemplates the absence of drunkenness and squalor. Expel the subjects of these two states and you have a condition of society in which insanity could scarcely gain admission. But if we apply the term to the actual state of American or European society—to the whole of society of the so-called civilized nations, with their vices and want, then the case assumes a different aspect. And it must be admitted that the onward march of modern civilization, to an extent, does seem to condition, though perhaps not necessarily, these several phases of society. Whilst it is important not to lose sight of these two views of civilization—the ideal and the actual—we find ourselves compelled to deal with the latter, and to confess that our civilization is a cause of neurotic and psychological disease. But be it remembered that this arises from an abuse of civilization, and is only incident to it. Let us accept civilization, it is our highest wisdom to do so, with all its risks, and let us exert the best energies of our lives to denude it of its abuses and its ill-gotten incidents. We are in more danger of insanity than the untutored savage, it is true, and yet but few of us would be willing to exchange, accepting his Eden desert island, with its ripe fruit and gorgeous flowers, without toil and worry. A great deal could be said profitably upon the subject of prevention, but as we have already extended this paper beyond the intended limit, and perhaps taxed your patience we shall be obliged to abridge this portion "Quem Jupiter vult perdere dementat prius." Viewing the fact that in all the countries around us more than one in every 500 of the population is a lunatic or an idiot, we may well seek to cast around us every guard that may shield from so direful a malady. It may be stated certainly that disease to an extent is preventable. It is well known that an inherited faulty formation of bone may be prevented, or greatly lessened, by proper attention to diet on the part of the mother during pregnancy, and the child during growing life. Other diseases may be warded off by habit and living, so that the tendency to them in the following generation may fade out or be much reduced. The more common forms of disease are easily preventable by having respect to the well understood laws of hygiene.

A friend of mine, in a figure of speech, discourses thus: "In the great contest of life, the weaker go to the wall. In the struggle of life, there will be the survival of the fittest. We have seen, he says, in the spring season of the year the trees of an orchard white with unnumbered blossoms. Myriads upon myriads feed every passing breeze with delicious odors for a day, and then drop to the ground forever, and when the fruit is formed on the tree, only a very limited number ever attain to maturity and perfection, while the ground is strewn with the windfalls and the useless. Why one goes on to maturity and perfection while the other perishes so soon we may not say with certainty, but doubtless one has some slight degree of advantage in the starting of the voyage; it may be a moment or an hour of time, or a particle of nourishment, but, whatever it is, the consequence is apparent. So it is in the grand struggle of life. Myriads perish at the very start, and as the process of life goes on, one by one, always the weaker, by reason of some defect in organization, inherited or acquired, fall out by the way. Christianity has taught us to pick them up, and try to nurse them to strength for further battle. She has built hospitals, and these weaker ones drift into these refuges from the storm. So it has been, and so it will be in the future. The stronger in body and mind will rise above and triumph over the hardness and roughness of life, becoming stronger by the very effort. To him that hath shall be given, and he shall have abundance of the possessions of life, but that abundance is drawn from him that hath not, and he falls out by the way, as the fruit falls ultimately from the tree." This is a beautiful and apt figure. Christianity has indeed among her many beneficent lessons taught us to pick up, and move into strength these weaker ones. And whilst you, gentlemen, in common with other Christian philanthropists, shall act well your part in this, it is your high privilege to advance further in the noble purpose of bettering mankind. You must, like the skilful gardener, examine carefully the tree and the soil for a solution of this dark problem, and you will find that the defect lies in one or other of these, or both; and when you shall have changed the soil and supplied suitable fertilizing elements to nourish healthy fruit, and when with pruning knife you have removed the shoots and defective limbs, then beyond a peradventure, or a may be, we shall see the wherefore and the why, and though there may be less blossoms and perfume to feed the passing breeze, there shall be a richer fruitage, which shall go on to maturity and perfection.

Society Proceedings.

MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

Stated Meeting, February 2nd, 1883.

DR. T. G. RODDICK, VICE-PRESIDENT, IN THE CHAIR.

Dr. Gardner exhibited the following specimens:—

1. *Fibroma of both Ovaries and Uterus*, occurring in the practice of Dr. Mullin of Hamilton. The specimen was removed *post-mortem*. Each ovary is of the size of a child's head. One ovary was impacted in the pelvis; the other could be felt through the abdomen as a hard, movable tumor projecting above the brim. The morbid growth consists apparently of an expansion of the whole ovary rather than an outgrowth from the organ. The fibroma of the uterus is a small subperitoneal outgrowth. In structure the tumors are very dense, and present all the characters of fibromata. Dr. Mullin promises a full report of the case. Dr. Gardner remarked that the specimen was one of exceedingly great interest, from its rarity of both nature and size. The most exhaustive articles on the subject he knew of were Leopold's paper in the 6th Vol. of the Berlin *Archives fur Gynecology*, published in 1876, and a paper by Dr. Coe in the *Am. Jour. of Obstet.* for July and October, 1882. Leopold had collected 56 cases of solid tumors of the ovary of all kinds of fibroma—carcinoma, enchondroma, and sarcoma—and from the reports at his command, which, however, were derived from the statistics of ovariotomists, he estimated that they constituted about 1.5 per cent. of all ovarian tumors. As, however, the tumors do not always attain a size calling for surgical interference, it is probable that if the records of *post-mortem* examinations were also taken, the proportion would be somewhat increased.

2. *A Uterus of normal size, with two small submucous fibroids projecting into the cavity of the body, and a smaller one projecting into the cavity of the cervix.*—One of those in the body is situated near to the internal os, which, however, it does not appear to have obstructed.

3. *An imperfectly developed Uterus, with an interstitial fibroma almost subperitoneal, of the size of a hazel nut, in the fundus.*—In neither of these latter cases was there a history of any symptoms having been caused by the tumors. Dr. Osler, speaking of the frequent occurrence of these small fibroids, ventured to say that over half of the women over fifty would have fibroids, they are so excessively common.

4. *A Fibrocellular Polypus of the size of a small orange*, which he had removed a fortnight ago from a lady of over sixty years of age. It was attached by a short, thin pedicle to the posterior wall of the cervix, a little below the internal os. When first examined, the surface of the tumor was of a deep, livid, blue color; when removed three days later, this appearance was intensified. On section of the tumor, it presented the usual appearances of intersecting trabeculæ of condensed areolar tissue, with interspaces, which were filled with recently effused undercolorized blood-clots. The patient is the mother of several children, and several years past the menopause. For the first five years after the menopause she suffered from symptoms of prolapsus uteri. She then remained well and entirely free from symptoms till last summer, during which she had a long attack of a fever of remittent type, accompanied with leucorrhœa and profuse night sweats, which exhausted her very much. For some months previous to the removal of the growth she suffered from aching in the lumbar region and occasional hemorrhages, only one of which was profuse. It was removed by Thomas' serrated scoop, with a view of reducing to a minimum the by no means great danger of hemorrhage. No bleeding followed. The recovery was speedy and perfect, except for the sacral pain, which is still present. The specimen is of interest from its unusual size (not rarity) for a polypus of its kind growing in this situation. Dr. Gardner had removed a good many polypi of this kind, but never saw one so large as the one in question. Gusserow gives the size as varying from a pea to a walnut. It possessed some medico-legal interest, as when removed it presented appearances whereby, if spontaneously expelled, it might have been mistaken by a careless or ignorant observer for the products of conception, and so abortion have been suspected.

5. *Malignant Disease of the Uterus.*—This specimen consisted of the uterus and appendages matted together by the products of pelvic peritonitis and cellulitis. There was a quantity of pus in the pelvic cavity, and recent lymph in the abdominal peritoneum. The depth of the uterus was

reduced to 1½ inches; its wall at the fundus thick. The vagina, in its upper part, ulcerated. The Fallopian tubes were dilated, and contained pus. The ovaries engaged in a mass of exudation. Pockets of pus in the cellular tissue, between the layers of the broad ligaments. The patient, a domestic servant, unmarried, aged 35, had consulted Dr. Gardner first in January, 1882, for continuous bleeding from the vagina for nearly six months previous. The vaginal portion of the cervix, as well as its cavity, were found covered with soft, spongy tissue, bleeding easily. It was decided to remove as much as possible of the diseased tissue. Scissors and curette were freely used. It was found that the diseased action had extended to the uterine cavity. The curette, applied to the fundus and walls, brought away a large quantity of tissue similar to that on the cervix. Fuming nitric acid was then freely applied to the whole surface. Patient recovered from effects of the operation without a bad symptom, and for some months gained strength, but the disease returned, and three months after the first curetting it was repeated, with the result of producing another short respite from the symptoms. In June she began to suffer pain, and after this the disease ran a steady course to death, which occurred somewhat suddenly in the beginning of January, 1883, from acute peritonitis. After the curetting, hemorrhage was never severe, and the vaginal discharge was never fœtid.

6. *A Case of Double Tubercular Pyosalpingitis*, from a patient dying of chronic pulmonary phthisis, with general tuberculosis. Both Fallopian tubes are dilated to the size of sausages and filled with pus and softened tubercle. No symptoms were known to have been referred to the pelvic region. The uterus appeared healthy. There were evidences of pelvic peritonitis.

Dr. Alloway referred to a recent operation for the removal of cancerous disease of the uterus devised by Dr. Baker of Boston, and published in the *American Journal of Obstetrics*, April, 1882. In this operation, a funnel-shaped mass is removed, having its apex at the fundus uteri and base on a level with the internal os. The actual cautery is then applied. Dr. A. spoke of the possible relation of the specimen of salpingitis exhibited to the condition known as tubal dropsy and ovarian disease, for which Mr. Lawson Tait has recently devised an operation: removing the uterine appendages for recurrent inflammations. Tait advises early operation, and reports a series of 61 cases, with only three deaths. (*Brit. Med. Jour.*, July 29th, 1882.) Dr. T. G. Thomas of New York endorses Tait's views, and reports 14 cases upon which he had operated, with 3 recoveries.

With regard to Dr. Gardner's case of cancer uteri, Dr. Trenholme remarked that unless seen early, before infiltration of surrounding tissues had taken place, curetting was of doubtful value as to prolonging life. Of course in some hemorrhages or offensive discharges it would be helpful. Dr. T. said that the specimen of fibroma of the ovaries would be of much more interest if a history of the case could have been had. Their being free in the pelvis would seem to have warranted a hopeful interference for their removal, thereby probably saving the life of the patient. The other specimen of multiple fibromata, also without history, was of interest, as it showed conditions apt to be met with in daily practice. Doubtless many cases of uterine trouble were due to such a condition, and not recognized during life. He related a case under treatment, where a small fibroma pressed on the calibre of the cervical canal and rendered menstruation painful.

Dr. Gardner, in reply to the remarks from Dr. Trenholme on curetting operations in uterine cancer, said that although of no permanent benefit in this case of cancer, he would treat a similar suitable case in the same way. He did not think the operation of extirpation of the uterus, with its very large mortality, had as yet reached a settled basis. In reply to Dr. Alloway in regard to the acceptance of Lawson Tait's operation of removal of the ovaries and Fallopian tubes in cases like that of the specimen presented, Dr. Gardner said that in this case he had not heard of any symptoms which would have justified interference, but although the operation was still to some extent *sub judice*, he believed that it would be demonstrated to be the only cure for the obstinate class of cases indicated by Mr. Tait, viz., recurrent, menstrual pelvic cellulitis and peritonitis, with the long list of local and reflex symptoms which usually accompany this condition.

Dr. Osler exhibited *the lungs of a horse which had died of pneumonia*, following the epidemic influenza which has been present in the city for some time; it was a well-marked example of *red hepatization* involving both posterior lobes.

Dr. Roddick exhibited *an oxalate of lime cal-*

culus, weighing nine drachms which he had removed that day from a patient, a young man, who had suffered with symptoms of stone for fifteen years. It was easily recognized, and from its size and hardness its removal by lithotomy was decided upon. The usual lateral operation was performed, and the calculus delivered entire with comparative ease, the forceps slipping once during the operation.

Dr. Mills read a paper on "Tonsillotomy and Uvulotomy." After alluding to the symptoms described as being usually associated with enlargement of the tonsils, such as oral respiration, snoring nightmare, altered visage, deafness, etc., he shewed that while moderate enlargement of the tonsils in some persons was of little moment, in others it might be a matter of considerable importance, as in the case of public speakers and singers, especially in the latter during singing, when the pillars of the fauces approximate considerably, a pair of hypertrophied tonsils must prove a great hindrance, and, from the extra efforts necessitated, must tax the powers considerably. Hypertrophied tonsils also, no doubt, contribute greatly to increase, if not to cause, pharyngeal irritation by keeping back secretions which would otherwise be removed. As a rule, tonsils should not be removed when acutely inflamed, except in chronic cases, with slight enlargement, and subject to recurrent inflammations which, at other times, do not project sufficiently to permit a satisfactory operation. The employment of the bistoury in such cases was deprecated, as most of the accidents from hemorrhage reported have been attributed to its use. Mackenzie's Tonsillotome reduces all the dangers to a minimum, and its advantages are such as to render it an almost perfect instrument. The functions of the uvula being to complete the soft palate as a curtain to close the posterior nares and to prevent, in speech, involuntary vibration of the soft palate, it follows that it should never be cut away close. The rule should be to leave as much as would correspond to its natural size. A pair of scissors is the best instrument, and the cut should be made obliquely upwards and not square across. No hæmostatic should be used unless absolutely necessary, as any application tends to increase the soreness that usually follows this operation.

Dr. Campbell said it was his custom formerly to leave what would have been as much as an ordinary-sized uvula, but he found the subsequent retraction so great that he now only removes the tip, and finds that quite sufficient in most cases.

Dr. Osler said that many cases of pigeon-breast now existing might have been obviated if the condition of their upper pharynges had been properly attended to in early life.

Stated Meeting, February 16, 1883.

The Vice-President, T. G. Roddick, M.D., in the Chair.

The following pathological specimens were presented by Dr. Osler.

ANEURISM OF ANTERIOR COMMUNICATING ARTERY.

Dr. George Ross narrated the case. A lad, aged 17, was admitted into the General Hospital on the evening of December 18th, in an insensible state, with stertorous breathing. Eyes closed, pupils contracted, muscles of arm and forearm rigid. Legs rigid and straight. From his friends it was ascertained that he had been well up to a year ago, but within this period he has had several severe attacks of bleeding at the nose. Three months ago he is said to have had an epileptic fit, from which he recovered in ten minutes. For eight days has had severe headache, very bad in the forty-eight hours before present attack. Two hours previous to admission he went out into the yard, where he was found in an insensible condition. On the 19th he remained in the same state. No albumen in the urine. Towards evening the rigidity of the muscles became less. Eyeballs prominent, and there is slight ecchymosis on right upper lid and under ocular conjunctiva. Left pupil is dilated. On the 20th, arms still rigid, legs relaxed. Has had several attacks of clonic spasms in arms and muscles of the back. Cheyne-Stokes' breathing well marked. Ecchymosis had deepened about right eyeball, and is commencing in the left. Temperature is rising. On the 21st, limbs relaxed; opens the eyes, but does not appear conscious. Veins of the optic disks very full, no other intra-ocular changes. Temperature 102°; pulse 125. The following day he was much worse; sphincters relaxed, coma more profound. Temperature 103°. On the 23d the temperature rose to 105, and death took place in the afternoon.

The *autopsy* revealed extensive hemorrhage at the base of the brain, involving the meninges,

anterior to the optic chiasm, and extending into the longitudinal fissure, and over the anterior part of the corpus callosum. On separating the orbital surfaces of the frontal lobes, an aneurismal sac, the size of a large pea, was seen springing from the anterior communicating artery and partially embedded in the contiguous brain substance, which was a little lacerated. When removed and washed, the sac was found to arise by a small orifice from the anterior communicating artery close to the right anterior cerebral. It was full of dark blood, and had ruptured at the lower surface, the rent being about two millimetres in length. The hemorrhage had extended along the sheaths of the optic nerves to the eyeballs. The other cerebral vessels were healthy. There was no heart disease.

Dr. Ross remarked on the difficulty of diagnosing the case at first, and of the assistance rendered by the development of subconjunctival ecchymoses. In his experience this was a very rare occurrence in cerebral hemorrhage.

Dr. Osler called attention to the fact of the frequency of aneurism of the cerebral vessels and to the fact that many cases of apoplexy in young persons were caused by them. This was the eighth instance which had come under his observation in the past few years, and all the specimens had been shown at the Society. Of these, four were of the middle cerebral artery, two of the basilar, and two of the anterior communicating. In seven of them death was caused by rupture of the sac. He remarked that in cases of fracture of the sphenoidal bone, or in instances such as this, where the hemorrhage occurred in the neighborhood of the optic nerves, the subconjunctival hemorrhages would be more common; but when the fracture was in the middle or anterior part of the orbital plate of the frontal, the hemorrhage was into the more superficial parts of the orbit, and more likely to produce ecchymosis of the lid.

ULCERATIVE ENDOCARDITIS, SIMULATING TYPHOID.

Dr. Ross reported the case; that of a man aged 26, admitted to the General Hospital on the 2d, in a state of delirium, with temperature 104°, pulse 100, and respiration 28. Though delirious, he would at times answer questions. Face was flushed, eyes bright, pupils small; expression nervous and anxious. Tongue dry, cracked, and brown; abdomen full; marked tenderness in right iliac fossa; no rose spots. Examination of heart and lungs revealed nothing abnormal. The following history was obtained: Had never been very sound in mind, but has been healthy; was at work on January 29th, when he was taken with a severe chill, followed by headache, vomiting, and nausea. Went to bed that evening; became delirious, and has been feverish, with severe headache, ever since. There have been several loose stools each day. On the night of the 2d he was very delirious, talking loudly, and getting out of bed. Passes fæces and urine involuntarily. On the 3d the temperature was 102°, pulse 125, and weak. On the 4th, after a very bad night, the patient was much quieter, dull and stupid; face dusky; can get no reply to questions; temperature 103°, pulse very weak; passed stools in bed. Patient gradually sank, and died on the next day—the third after admission, and the eighth of his illness. The heart and kidneys were exhibited. The autopsy showed extensive ulcerative disease of the aortic valves, two of which had fused (congenital), and were sclerotic. The vegetations were soft and recent, and there was a small perforation of one segment. The mitral valve was unaffected. The spleen was about twice the normal size, but presented no infarctions. The kidneys were enlarged, and showed six or eight recent infarctions. In the small intestine there were half a dozen spots of hemorrhagic infiltration of the submucosa, the centre of each occupied by a small white necrotic patch (infarctions). In the left occipital lobe there was a spot of recent red softening, the size of a small apple. No other foci in the brain.

Dr. Ross stated that he had thought the case one of typhoid fever from the mode of onset and the pronounced abdominal symptoms. The only suspicious features had been the bright eye and injected conjunctiva, and if a murmur had been heard a correct diagnosis might have been reached. The experience of a considerable number of cases had now made both physicians and attendants at the General Hospital tolerably alive to the subtleties of this disease, but in none of the previous ones with typhoid symptoms had the course of the disease been so rapid.

In reply to a question by a member, Dr. Ross remarked that the state of the valves was certainly such that a murmur might have been expected, but none was heard when he examined the patient the day after admission. The condition of the vegetations would almost prevent a regurgitant murmur.

Dr. Osler exhibited the characteristic micrococci of the vegetations, stained with aniline blue. In this instance there were a few bead-like chains such as had been noted by some writers. Their relation to the disease was still in dispute. They are found in the simple warty vegetations and in the outgrowths often met with in old sclerotic valves; indeed, they appear elements common to various endocardial processes which have very different symptoms and arise under different conditions. Valves which are malformed, as in this instance, appear specially prone to be attacked with this form of the disease.

CALCIFICATION OF THE TOOTH-PULP.

Dr. Osler showed, for Dr. Lovejoy, the section of a first molar with the pulp calcified. The tooth was large and not decayed, but was at times so painful that it was thought advisable to extract it. The cavity was filled with a mass of stony hardness, darker than the dentine, but having much the same appearance. A narrow space separated it from the wall of the cavity. In some animals the pulps become converted into secondary dentine, and in old people progressive calcification is not uncommon. In this case the man was vigorous, middle-aged, with good teeth.

CHYLOUS ASCITES.

Dr. Ross showed a bottle full of milky looking fluid which had been removed from the peritoneum of a lad under his care, who had albuminuric anasarca. The abdomen was much distended, and several pints of fluid were removed. There were no formed elements in the fluid.

DISEASED PLACENTA.

Dr. Gardner exhibited a diseased placenta from a patient who last menstruated on the 12th of August, quickened two days before Christmas and was delivered of a dead macerated fœtus on the 7th of February. The specimen was much shrunken, measuring about eleven centimetres in diameter and one centimetre in thickness. In general the substance was much paler and firmer than that of the normal placenta. There were a number of firm nodules, evidently the result of placentitis or of extravasated, decolorized, and organized blood-clot, according to the views variously held by authorities on the subject. Interspersed between these nodules were a number of cavities varying in size, from a cherry to an almond, filled with recent blood-clot. The membranes were opaque and very friable, a large part remaining in the uterus and requiring introduction of the hand for its removal after the expulsion of the placenta. The patient is the mother of five children, all born at full term after normal pregnancies. During the pregnancy in question she had been œdematous to a slight extent, had suffered from a feeling of general weakness and craving appetite. When first seen by Dr. Gardner four days before her delivery, she was suffering from violent headache of the frontal and vertical region, evidently of uræmic character, as there were distinct general anasarca and slightly albuminous scanty urine. For nearly three weeks the fœtal movements had become gradually more feeble, and during the last three days had entirely ceased. At the same time that the movements ceased the uterine tumor sank towards the pelvis and had lost its normal elastic feel. Fœtal heart sounds were inaudible. The headache appeared at the same time as the cessation of fœtal movements and collapse of the uterus, with renal insufficiency. The fact seems to bear out the pressure theory of uræmia in pregnancy.

Treatment before labor consisted in purgative doses of compound jalap powder, with full doses of bromide of potassium and chloral. As the latter gave no material relief to the headache, it was soon discontinued, and fifteen-minim doses of Battey's sedative solution of opium substituted with marked success. After the uterus was emptied the urine increased in quantity, the headache disappeared, and, with the exception of a slight attack of pleurisy, the patient made a good recovery.

APOPLEXY INTO THE VENTRICLES.

Dr. Armstrong mentioned the case; a man, aged 37, who had consulted him with severe headache, slight intolerance of light, and vomiting. Patient was under treatment for secondary syphilis. In a few days, he felt better and was able to go out. On Saturday, the third, he took supper in the evening, but vomited it, complained of great pain in the head, became comatose, and died at eleven o'clock. A post-mortem revealed extensive hemorrhage into the lateral ventricle, and the blood had also passed into the fourth. The walls of the lateral ventricle were unbroken, and the source of the hemorrhage undetected.

THE TREATMENT OF PUERPERAL SEPTICÆMIA BY IODOFORM SUPPOSITORIES.

Dr. Alloway presented the records of six cases of puerperal septicæmia, three of which had been treated by a new method, viz., the introduction into the uterine cavity of idoform suppositories. He referred to the care and anxiety which these cases caused to the attendant, the frequent visits necessary if the ordinary method of repeated intrauterine injections is followed, as in general practice the assistance obtained is rarely skilled enough for this. The advantages of iodoform in general surgery were now fully recognized, and it occurred to him that they might be extended to the treatment of the raw placental surface, and to the lacerations and bruises of the passages. The site of a separated placenta had been well compared to the stump of a limb after amputation. With this remedy we had the advantages not only of a topical action, but, applied in the manner directed, the effect was continuous, and the vapor, or whatever it was, given off, permeated to all parts. Too often with injections, the superficial parts were cleansed and in an hour or so, unless repeated, the discharges were again fetid. He believed that with the iodoform we could get a more effectual disinfection of the intrauterine cavity in these cases than with the ordinary solutions, and the trouble of constant injections was completely obviated. The author referred to the current views on septicæmia, particularly to the formation of a virus by the bacteria in the decomposing discharges, and suggested that if, as Binz has shown, the iodoform controls the activity of the protoplasm of the colorless blood-corpuscles, it may do the same with the bacteria. In carrying out the treatment he used a Sims' speculum, washed out the uterus first with plain or carbolized water, and then, with a tent-inserter, passed the suppository far up into the fundus. He used them of the strength of ten, fifteen, or twenty grains, and usually introduced one night and morning. No poisonous effects had been noted.

The author first read the notes of three cases, two of diphtheria of the passages, which were treated successfully with injections of carbolic acid and Condy's fluid ; the third, a very severe case of septicæmia, which he had not treated during the entire illness, but which had had no injections, and terminated fatally.

The cases in which he had used the iodoform were as follows : Mrs. B., aged 23, confined June 20, 1882 ; fœtus nearly at full term, but had been dead some time and was decomposed ; fluids very dark and offensive. Uterus was washed out immediately with carbolic solution, and the nurse was ordered to syringe the vagina with the same every three hours. Up to the twenty-third the patient did well, but in the afternoon of this day she had a chill, and when seen in the evening the temperature was 104.5°, and the pulse 123. There was no pain, discharge slight, a little offensive. The cavity of the uterus was washed out with warm water, and a fifteen-grain iodoform suppository inserted. On the twenty-third the temperature was 101°, pulse 110. Uterus again washed out and another suppository inserted, and in the evening a third. No further chills ; patient doing well. On the twenty-fifth the temperature was 99° ; same treatment followed. She made a good recovery.

Mrs. E., aged 30, fourth pregnancy, confined September 24, 1882. Easy labor ; did well until the 26th, when she had intense perimetritic pain and a severe chill ; temperature 103.5°, pulse 126 ; ordered poultices, and gave Battey's solution of opium. Followed same local treatment as in former case. In the evening the temperature was 104° ; introduced another ten-grain suppository. 27th, pain gone, temperature 100° ; same local treatment morning and evening. 28th, better, continued the suppositories. By the 30th the temperature was normal,and she made a good recovery.

Mrs. G., aged 25, third pregnancy, confined December 13, 1882. Dead twins at the sixth month. After-birth came away and seemed entire. Patient has had a series of chills in the past twenty-four hours, and after delivery the temperature was 105°, pulse 100, and she was in a very excited state. A portion of adherent placenta was removed, and grs. xx of quinine were given. On the 14th she was quieter, temperature 103°, pulse 140 ; uterus was washed out, and two ten-grain suppositories inserted. No tenderness. 15th, temperature 100°, pulse 112 ; same local treatment. On the 16th, had diarrhœa ; had no suppository last evening ; discharge this morning a little fetid ; temperature 103°, pulse 124 ; two of ten grains each inserted, and in the evening a third. To the 21st, she had one every morning and evening. On the 22d the treatment was stopped ; temperature normal.

Dr. Trenholme thought the practice a reasonable one he had had no experience with the remedy; indeed, he was one of those fortunate ones who have never had a case of puerperal septicæmia in private practice.

Dr. Gardner had used iodoform in lacerations of the vulva and perineum, and with advantage. The tenacity with which it adheres to raw surfaces, and even remains after injections, is a point in its favor. He had used it also in chronic endometritis, and, although it had diminished the pain, no permanent good resulted. He had been in the habit for some time of rendering sponge tents antiseptic with iodoform.

Dr. George Ross referred to diphtheria of the vagina after delivery, and remarked upon its insidious onset in a case which he had treated. He thought Dr. Alloway's suggestion very valuable, and could speak of the benefit he had seen follow in one extremely severe case of puerperal septicæmia. The fetor was removed, and a decided improvement manifested within forty-eight hours. He did not think there was any danger of toxic effects in the doses mentioned.

Dr. Cameron spoke of the great influence of iodoform in subduing pain, but believed the special advantages in this form of treatment were the constant presence of the antiseptic in the uterine cavity and the certainty that all parts would be subjected to its action. In the cases reported some of the benefit might reasonably be attributed to the washings, which should not be neglected in any case.

Dr. Armstrong said he unfortunately had had a good deal of experience in these conditions, the treatment of which must in a great measure depend on our theory of their production. In the grouping together of actual facts, as observed by him, he had found them to harmonize very considerably with the division adopted by Matthews Duncan, namely into cases of *simple sapræmia* and *true septicæmia*. In the former there is absorption of putrid ichor by the lymphatics, or its passage into the circulation through the uterine sinuses; the poison does not exist in the blood, much less grow and multiply in it, while in true septicæmia the poison is a germ which lives, grows and multiplies in the blood (the discharge in these cases may indeed be not fetid at all). In the treatment of simple sapræmia, and Dr. Armstrong took this to be the nature of the favorable cases described by Dr. Alloway, the object is to remove the cause as thoroughly as possible, and this can be accomplished by careful cleansing and disinfection of the parts by carbolic acid or other disinfectant; and it would seem that iodoform possesses advantages over carbolic acid for this purpose, being less troublesome and saving much valuable time to the practitioner, but as to its unfailing efficacy in cases of true septicæmia Dr. Armstrong thought the reader of the paper was inclined very much to over-estimate it.

Dr. F. W. Campbell said he thought the Society indebted to Dr. Alloway for the important cases which he had brought before them. The high mortality from puerperal septicæmia under existing methods of treatment would, in his opinion, warrant a trial of the method suggested by Dr. Alloway, which seemed to have been singularly successful. He thought there was a certain class of cases where it would be well to anticipate, as it were, a condition of septicæma, as it often supervened. He alluded to cases where there was extensive adhesion of the placenta, and where its removal was attended with great difficulty. In such cases, he thought the introductions of iodoform would be found very useful, not alone in preventing putrefactive changes, but in healing torn surfaces.

Dr. Alloway stated that he had been induced to lay his limited experience before the Society, in the hope that other members would test the practice. For his own part, he felt much more confidence now in the treatment of these cases. In illustration of the antiseptic powers of iodoform, he showed two bottles of meat infusion, which had been allowed to decompose; into one he had put a little iodoform and the decomposition had been checked, the putrid odor was removed, and the solution rendered, as was very apparent, much clearer by the death and subsidence of the bacteria.

In reply to Dr. Armstrong he would say that the whole subject of septicæmia has been, until quite recently, in well-nigh hopeless confusion. It was, however, now almost universally acknowledged that septicæmia is due to the presence in the blood and tissues of a virus, which virus is *not* a germ or number of germs, but is a product generated by micro-organisms, by certain vital processes and under certain conditions of their surrounding media. These organisms do not arise spontaneously in the blood, but are introduced from without, and are incapable of multiplying in

the living healthy tissues. Under certain circumstances they produce a simple uncomplicated paroxysm of fever, beginning with a rigor, followed by a rise of temperature and ending (if the dose be not too large) in defervesence and recovery. And it matters little what classification we use, whether we regard Dr. Matthews Duncan's of simple and true septicæmia, or any other division, they are but graded conditions of one and the same disease, differing only in the degree of severity. If Dr. Duncan maintains that in so-called true septicæmia the poison is a germ, he stands alone in his theory, as widely published experiments prove the contrary; simple cases certainly do occur, and it is probably in this way: the site of the placenta receives infection from septic bacteria; if the discharges are retained in contact with the wound, decomposition sets in, pyrogen is produced, it is absorbed, a toxic effect follows, and septicæmia is established. If we now recognize and are fully alive to the beginning of a serious trouble we will cleanse the uterus of the already-formed virus, and protect the patient from its further formation and absorption. In a few days the patient gets well, and she is said to have had an attack of simple septicæmia. But let us not recognize the importance of arresting this toxemia, and content ourselves with occasional antiseptic washings; there is continuous absorption, occasionally interrupted for a few minutes by the washings, the vitality of the system is progressively lowered, and especially the tissues bordering the wound, which become moribund or die right out. The germs invade and breed in them, more poison is produced and absorbed, the toxemia becomes intense, embolic centres of inflammation are formed, and the end comes. This is probably Dr. Duncan's true septicæmia, but which is really the result of failure of the remedial agents used in the treatment, and on post-mortem section we find the channels and cavities of the body swarming with bacteria. It will be remembered that the fatal case Dr. Alloway mentioned in his report began in this simple way: there was an accumulation of discharge arrested in the inflamed womb (endometritis), germs found in this discharge a suitable soil for the generation of virus, and this not having been interfered with death took place. The second case treated by iodoform suppositories began in identically the same way (severe peri-uterine pain and chills), but was arrested in the way he had explained, through the agency of iodoform. The other two cases treated with iodoform were the result of dead children having been borne to them; and as the history of such cases, when sepsis sets in, is very often death under any circumstance, he does not think they deserve to be looked upon as simple. Dr. Alloway concluded by saying that his remarks referred to septicæmia as met with in private practice, and not to those epidemics which have prevailed in large lying-in hospitals, or to those rare cases of intense poisoning where the cause of death is more shock than gradual poisoning with elevation of temperature.

BRAINS OF TWO MURDERERS.

Dr. Osler presented the brains of Richards, who murdered a comrade at Sweetsburg, Que., and of O'Rourke, who killed an old man and his daughter, at Milton, Ont. Richards was a hardened criminal, had been in the army, and had been discharged as unfit morally. He cut his throat on the morning of the day fixed for his execution. His brain was large and well developed; the asymmetry between the convolutions and fissures of the hemispheres very slight; the organ was not of the confluent fissure type to any special degree; the secondary and cross sulci were not numerous, and the majority of the convolutions were arranged in a typical manner.

O'Rourke was a man of no education, had had illusions, had served in the penitentiary. The plea of insanity was raised in his defence. His brain was under-sized, the cerebral hemispheres scarcely covered the cerebellum, and there was marked asymmetry between the fissures and convolutions of the two sides. No special degree of confluence of the fissures, except in the right parietal lobe. In both frontal lobes there was a partial splitting of the second gyrus and an approach to the type of four frontal convolutions. The secondary sulci were unsually abundant. The brains were preserved by Giacomini's method.

Dr. Henry Howard said this was the second time in the space of thirteen months that this Society has been favored by Dr. Osler with a demonstration, at each time of two brains taken from the cadavers of criminals, who had been tried for and found guilty of murder. The brains before us appear to be of a low type; they may, or may not, be teratological, we cannot tell, because we do not know what constitutes a normal brain. There may be pathological defect in these brains, neither macroscopical nor microscopical but ascopical, we cannot tell. When we know

the anatomy of the normal man, surgically and chemically, more particularly of the whole nervous system—which we do not now know ; when we know the physiology of all the organs of the normal man, more particularly of the whole nervous system—which we do not now know ; when we know the ætiology and pathology of what we call insanity, then, and not till then, will we be able to say what constitutes a teratological mental organization,—then, and not till then, will we be able to say what is the pathological defect which is the cause of mental derangement, which we call insanity—meaning thereby a state of mind the opposite to sanity. Under existing circumstances we have but little to guide us more than a man's conduct ; and when we see a man a habitual criminal, and commit such terrible unnatural crimes as murder, we know that such a man is not as other men that are non-criminals, and we must assume that he is what he is in virtue either of teratological or pathological defect, in his mental, which includes his intellectual, organization. We assume this for the following reasons : first, that we do not find men of normal minds, normal intelligence, guilty of these crimes; secondly, that as mind and its phenomena is one of the qualities or properties of matter with which the Creator endowed it, and the higher the degree of organic, animal matter—matter in the concrete—the higher is mind and its phenomena developed. Therefore, when we find a man to be a murderer, we must assume that he is such in virtue of an abnormal state, either teratological or pathological defect, of his mental organization. From the history of the two men whose brains are now before us I come to the conclusion that the man Richards labored under teratological, and probably pathological, defect of his mental organization, and the man O'Rourke under pathological defect of his mental organization ; and I consider it quite possible that the latter being an inebriate, and having drank a quantity of whiskey that day, committed the crime while in a somnambulistic, not drunken, states, and afterwards, forgetting all about it, accused another of the crime.

PROVINCIAL HEALTH ACT.

Dr. Larocque, the Health Officer of the city, called the attention of the members to the Act now before the Legislature, and gave a sketch of the progress which had been made during the past few months. The Act provides for the establishment of a Board of Health for the Province, to be composed of three medical men, three commissioners, and one sanitary engineer. He urged the members to do all in their power to get the bill passed this session.

MEDICO-CHIRURGICAL SOCIETY.

Stated Meeting, March 2nd, 1883.

1st Vice President, Dr. T. G. Roddick, in the chair.

Dr. Trenholme exhibited a fibro-cystic tumor of the uterus.

The patient, a well-formed, healthy girl, 39 years of age, has always had good health. About 8 years ago she discovered a tumor in right side, which slowly increased for five years, when it took on rapid growth. It became smaller after each menstrual period till the last 3 years ; since then has not ever diminished at all. At this time she noted that the tumor moved in one night from the right side to the middle of body.

The result of several careful examinations was that there were two tumors. The one on right side being lowest and most firm to the touch, and fluctuation not felt. The left, the larger, was felt to be moveable from the other and fluctuation was felt, but not distinctly. A well-marked sulcus existed between the growths; both were of even general contour. Per vaginum the os was found to be high up, and, so far as the finger and sound could indicate, showed the lower growth was uterine, and probably sprung from back part of the uterus. The sound could be introduced with much difficulty only 2½ inches. The left tumor I thought might be ovarian, and, if so, could perhaps be removed, and thus afford relief to the great sufferings of the patient, and which she said were at times dreadful to endure, and of late rendered her life so miserable that she willingly subjected herself to the operation, though she was more than well apprised of the risk she ran, and was told by me that she was as likely to die as to recover,—the probability of recovery (should the uterus require to be removed) being about equal.

After preliminary attention to the state of bowels, etc., assisted by Drs. Hingston, Robilliard, Gardner, Armstrong, Young, Henderson and Wood, the operation was begun at noon on the 19th February, and lasted two hours 15 minutes. The nature of the growths are now apparent, and the

amputation of the stump was followed by considerable bleeding, and some of vessels secured with difficulty. Hemp ligatures were used internally, except one silver suture to close the os internum. The outer wound was secured by deep silver wire sutures, superficially by horse hair. The patient soon recovered consciousness, and though vomiting supervened she made a gallant fight for life, but died on 5th day, in the evening, from exhaustion, due to uncontrollable vomiting. The temperature and pulse were little above the natural course till toward the end of life.

The following morning, 15 hours after death, Dr. Osler kindly made the post-mortem examination.

The following are his notes :—

Abdomen distended. Union at the lower and upper portions of the incision and of the skin in the middle portion. Coils of intestines reddened and sticky, but no lymph over the membrane. There is no peritoneal effusion. Parietal layer is reddened from recent sub-peritoneal extravasation. Last part of ilium adheres slightly to the abdominal walls. On left side of the pelvis the ligated broad ligament is seen ; its surface is rough and irregular, and not covered with any membrane. By the side of the rectum is a space containing dirty bloody fluid.

The stump of the uterus adheres to the rectum. The walls of the pelvis are in good clear condition. Stomach, liver and kidneys healthy.

A committee, consisting of Drs. Gardner, Osler and Armstrong, was appointed to examine the tumor and report to the Society.

Dr. George Ross spoke of the importance attached to investigation into the cause of death in cases of abdominal operations. He had recently had a conversation with Dr. Thomas in New York, and agreed with him in the opinion that patients may die from septicæmia without the signs of high temperature, chills, etc., from an overwhelming dose of the poison being absorbed,—the symptoms in those cases being more like those of hæmorrhage.

Dr. G. T. Ross then reported a case of leücocythemia.

J. S., æt. 24, first seen on 15th January, 1882 suffering from jaundice. Never had ague nor syphilis. During last year (1881) attacks of epistaxis and headache were frequent, with failing strength and appetite. In June of same year noticed his abdomen becoming large. Family history good.

Present condition.—Spare build, chest walls thin, no heart murmur, lungs healthy, abdomen large and tense. A solid firm mass on left side reaches below crest of ilium and extends beyond median line. No ascites. Hepatic dullness normal. Axillary, inguinal and cervical glands sensibly enlarged. Cutaneous circulation very marked. No appetite, temperature normal. Urine dark with bile, no albumen. Skin and conjunctiva deeply jaundiced.

July 20, 1882.—Patient has recovered from jaundice, and says his health latterly has been fairly good, although never free from sense of weakness, with occasional severe headaches and epistaxis. To-day has severe pain across abdomen, with hurried breathing, not markedly anæmic, expression listless and apathetic. No dropsy, Measurement of abdomen increased half inch since January last. Decided tenderness on pressure over sternum. Temperature 102, pulse 118, respiration 32. To have hot applications with laudanum to abdomen and quinine internally. Blood showed great increase of white corpuscles. Dr. R. P. Howard saw the case in consultation, and gave unfavorable prognosis. He advised arsenic and iron internally.

August 26.—Increased hepatic dullness. No marked tenderness over liver, and no return of jaundice. Continuance of weakness, headaches and nose-bleeding. Dyspnœa on exertion.

Blood examined shows red corpuscles in c.m. 3,450,000 ; per hæmic unit 69; ratio white to red 1 to 6½ ;red corpuscles uniform ; no microcytes present.

December 20.—Abdominal measurement increased, as well as liver dullness. Nose-bleeding and headaches have continued ; complains of great weakness, and is unfit for business. Chest and limbs much emaciated. Cutaneous veins very prominent. Muchd yspnœa on exertion. Temperature and pulse normal. Urine pale straw colour, contains urates, no albumen, to have port wine with meals, and iron with phosphorus pills.

January 7, 1883.—Bleeding from lower incisor tooth, arrested with difficulty. Great appetite recently. Abdominal distension greater; sleeps a great deal, and wants to be left undisturbed. Complains of vertigo on raising his head or changing position. Iron and arsenic continued.

January 15.—Diarrhœa set in increasing general weakness. Complains also of constant noises in his ears, and his hearing is markedly

interfered with. From this time the patient sank rapidly and died comatasse on the evening of the 24th.

Autopsy by Dr. Osler 30 hours after death :— Body emaciated, skin livid, abdomen distended, no dropsy. In abdomen omental veins much distended. Peritoneum uniformly injected. Spleen greatly enlarged, reaching below anterior superior spine of ilium. *Thorax*—a few adhesions, but no fluid in pleuræ, pericardium, distended by an enormous heart, contains couple ounces clear serum. Heart very large, all chambers greatly distended with tolerably firm chocolate-colored coagula. Weight of clots in chambers alone, not including veins, is 620 grms. ; valves normal, substance pale. Arteries and veins leading from heart distended with brownish clots. Lungs crepitant, a little congested at bases ; vessels very full, mediastinal lymph glands enlarged.

Spleen.—No adhesions whatever. Before excising the portal system was carefully dissected out. Vessels all enormously distended with clot. Circumference of portal vein just above junction of its branches is 11 C. M. Splenic vein very large, joined by four or five large branches leaving the spleen and other greatly distended veins from stomach. Spleen weighed 7½ lbs. and measured 13 ins. by 8½ ins. Shape is preserved. No special thickening of capsule. Fibrous stroma not specially evident. Malpighian bodies not enlarged ; no localized lymphoid growths. Under microscope shows simple hyperplasia of normal spleen elements. Cells of the pulp and red blood corpuscles form chief elements of structure. In pieces examined only one or two nucleated red blood corpuscles are seen. *Liver* fully twice normal size, smooth, somewhat soft, veins distended. The microscope shows an increase of colorless blood corpuscles mingled with liver cells. *Stomach* shows no special change.

Small Intestines.—Veins distended ; no enlargement of Pyer's patches ; solitary follicles uniformly enlarged. Blood altered in upper part of intestine, and general catarrhal state of both small and large bowel. *Kidneys* enlarged, dark color, veins deeply congested, cortex swollen. *Bladder* contains dark ammoniacal urine. Mucous membrane intensely inflamed, and covered with a small amount of exudation. Mesenteric and retroperitoneal lymph glands enlarged, soft and red in color. *Marrow of sternum* and of ribs looks like thick, greyish bloody pus. Under the microscope shows numerous marrow cells, very few myeloplaques and nucleated red blood corpuscles—the latter less than in many specimens of normal red marrow. Small lymphoid elements not specially numerous.

Brain.—Extreme degree of engorgement; arteries at base full of clots, veins greatly distended, and on section puncta vasculosa are unusually numerous. Choroid plexus and velum are engorged. Substance of brain is somewhat soft, but presents no special morbid ch nge. *Eyes.*—Both retinæ presented extensive leukæmic changes, in the form of opaque white spots surrounded by congested and hemorrhagic areas. The disks were not swollen.

No definite origin for the disease can be ascertained in the facts before us, which agrees with the acknowledged obscurity regarding the causes of the disorder. Neither age, sex, nor social position is free from liability to leukæmia. Amongst its causes are given, malaria, long-continued intermittent fever, continued excitement, chronic intestinal catarrh, leading to hyperplasia of solitary glands and Pyer's patches, syphilis and depressed states of the mind. According to Hughes Bennett the complications of epistaxis and diarrhœa are the most common, the former of which stands out as a prominent symptom in this case. There was no profound anæmia. Observations upon the blood were instituted at different times, the last being on 7th January, but the variation in its condition was not striking. The most remarkable feature of this case was the condition of the blood post mortem, for it resembled the state found in death by apnæa, with exception that, instead of the left chambers of the heart being empty, *all* the chambers were engorged with enormous clots, the weight of which was referred to. Brain, lungs, portal system, kidneys, omentum and, in fact, all the viscera were likewise engorged to a remarkable degree. *Retinitis*, an uncommon lesion, also complicated this case.

The liver is often diseased in leucocythemia, generally from hyperplastic increase of the cells and colorless corpuscles, as in this case. The kidneys are usually normal, but here they were swollen and congested.

The treatment I have not detailed, but may say that, generally, it was palliative and symptomatic, as the indications arose, combining tonics, nutrients and stimulants to support the vital powers.

Dr. George Ross spoke of the rarity of this disease in this city and America as compared with other countries; he had only seen one case in the Hospital in ten years, but has seen others in private practice, whereas several cases of the rarer Hodgkins' disease had come under his care in the Hospital.

Dr. Osler said the late Dr. John Bell was the first to report a case in Canada.

The points of special interest in the case just reported were the enormously distended heart and venous system.

As there were no adhesions it might have been a good case for removal of the spleen. A successful operation was recently performed in Italy.

Dr. Smith mentioned a case of leucocythemia under his care which had been considerably relieved by treatment in which iron and arsenic were employed, together with generous diet and inunctions of mercury.

Dr. George Ross said the remarkable temporary improvement seen in blood diseases could not be always due to treatment. Sometimes in pernicious anæmia such an improvement may be noticed as to make one think that an error in diagnosis had been made till they relapse and terminate fatally He had lately such a case in the Hospital. Under arsenic and iron, the patient got well enough to resume work, but returned to the Hospital and died. He has also noticed this temporary improvement in Hodgkins' disease.

Dr. Roddick exhibited a photograph of a child shewing recurrence of lymph adenomatous glands after removal by him.

Correspondence.

To the Editor CANADA MEDICAL RECORD.

DEAR SIR,—In order to complete the history of the case of "Interstitial Fœtation" published in your edition of November last may I ask you to find room for the enclosed remarks by Mr. Alban Doran, which were made before the Obstetrical Society of London on the 1st November, 1882.

Yours truly,

CARR HOLSTOK ROBERTS,

L.R.C.P.L., M.R.C.S.E., S.S.A., M.B., M.A.

Coningsby House,

Herries street, Harrow Road, London, Eng.

Feb. 25th, 1883.

Extra pressure on my time during the last three months must be my apology for not having sent them before:

INTERSTITIAL OR TUBO-UTERINE GESTATION.

Mr. Alban Doran exhibited a specimen of this condition. The clinical history of the case, under Mr. C. H. Robert's care, was reported in our pages in October. The gestation-cyst was situated at the right side of the fundus uteri. At the anterior and outer aspect of the cyst the round ligament sprang from it, and the Fallopian tube passed into it, expanding as it did so into a funnel-shaped orifice. The lower part of the cyst bulged into the uterine cavity, and a bristle could be passed from the uterus through the tube into the cyst. The tube was here also dilated into a funnel-shape at its entrance into the cyst. The tubal origin of the cyst was thus proved. It had burst at the second month. There was a corpus luteum in the right ovary. Mr. Doran had examined the five other cases of the kind that are to be seen in the London museums, and gave an account of them. He remarked on the rarity of the condition and the tendency to early rupture. Had the abdomen been opened, amputation of the uterus would have been the only practicable treatment. He thought that many cases in which development in a supposed hernial pouch of the uterus was suspected were probably tubo-uterine.

To the Editor of the MEDICAL RECORD.

SIR,—A few days ago I received through the post office a circular signed by the Secretary on behalf of the Committee of the McGill Graduates Society, anent the difficulties in the Materia Medica Department of the University. The circular details the unsatisfactory state of matters during the past session, as well as for many sessions previously, and asks that the question on an enclosed slip be signed and returned. The question is, "Would the removal of the present Professor of Materia Medica be conducive to the best interests of the University?" I would like to ask was this step taken without authorization by the members of the Graduates Society. If so, it seems to me a high-handed proceeding. It does not look well to have outside men, non-professional men, mix up in a disturbance which does not actually concern them. Surely there is no need of having matters pushed to the extremity in which this circular would place them. Is the Medical Faculty of McGill, the oldest Faculty in the Dominion, not able to regulate its internal affairs, without "every graduate since 1860" coming to its aid? I think it should be. I

fear, however, from what I hear, that it is not united, and if this is the case one section would seem to be tacitly working—perhaps indirectly, yet still working—for the removal of a colleague, while another section is asking that colleague to modify his course, so as to make it acceptable. If all would unite on this latter course I hardly think Dr. Wright could hold out. He is a gentleman, a Christian minister, and a man of rare talent, and is quite able to give such a course as would be creditable to himself and acceptable to his class. Let him put into practice some of the doctrines which I have many times heard him preach and the matter I feel can be arranged. Above all I hope no one who has received this circular will return it signed, as such a course is, I think, likely to increase the difficulties by which the Faculty are already surrounded.

Yours,

A McGILL MEDICAL GRADUATE.

THE CANADA MEDICAL RECORD,

A Monthly Journal of Medicine and Surgery.

EDITORS:

FRANCIS W. CAMPBELL, M.A., M.D., L.R.C.P., LOND

R. A. KENNEDY, M.A., M.D.

JAMES C. CAMERON, M.D., M.R.C.P.I.

SUBSCRIPTION TWO DOLLARS PER ANNUM.

All communications and Exchanges must be addressed to the Editors, Drawer 356, Post Office, Montreal

MONTREAL, MARCH, 1883.

THE NEW ANATOMY ACT.

A systematic desecration of graves in country districts and an open traffic in dead bodies have caused such scandal in this city during the past winter months, and so thoroughly aroused public indignation, that the authorities have been at last compelled to take vigorous action. There is a grievance upon both sides; the public bitterly complain that the graves of their friends and relatives have been desecrated to supply subjects for the Medical Schools; on the other hand, the Medical Schools complain that they have long been defrauded of dissecting material which is lawfully theirs, and compelled to obtain it as best they could, they therefore with equal justice claim to be protected in their lawful rights. The old Anatomy Act was good enough if it had only been enforced; but, like many other excellent Statutes in this Province, it has been allowed to become practically a dead letter. Many circumstances have combined to effect this result; the greed or apathy of officials, religious considerations, the mistaken philanthropy of tender-hearted governors and managers have all contributed to cut off the supply of material from the large public institutions which the law distinctly set apart for the use of the Medical Schools. We venture to say that if the Coroner, Inspector of Anatomy, and officials of public institutions receiving a government grant had done their duty in the past, and faithfully carried out the provisions of the Anatomy Act, abundant material would have been forthcoming, and body snatching consequently unknown. The new Act has just passed the Quebec Legislature: in our next issue we hope to give it in whole or in part.

OBITUARY.

DR. ALEXANDER H. KOLLMYER.

Many a subscriber to the RECORD will learn with deep regret that Dr. Kollmyer is dead. For twenty-five years he has been in various ways brought prominently before medical and pharmaceutical students, as grinder, lecturer and professor, and in each capacity was much beloved. Scattered all over Canada and the United States are medical men who in some way came under his tutelage, and we know that in the hearts of many he was affectionately remembered. Dr. Kollmyer was born in Montreal in 1832. He was educated at Skakles School, an institution which ever will occupy a prominent place among the early English schools of this city, as being the educational birthplace of some of our most prominent men. Mr. Skakle dying before Dr. Kollmyer's education was completed, he was transferred to the High School. In 1848 he entered the chemist's shop of Mr. Rexford, where he remained four years. In 1851 he became a medical student of McGill College. In 1855 he was appointed apothecary to the Montreal General Hospital, where he remained till he graduated in 1856. He then commenced practice in Montreal. In 1868 he was appointed lecturer on Materia Medica, and in 1869, lecturer on Botany in the Montreal College of Pharmacy. In 1872-3 he not only lectured on these two branches, but also in Chemistry, and by these efforts the College was maintained in active efficiency, and the druggists

were enabled to obtain the charter which gives them power to examine and license their own students. On the organization of Bishop's College Faculty of Medicine, in 1871, he was appointed to the Chair of Materia Medica and Therapeutics. This psition he held up to the period of his death. As a lecturer on Materia Medica he was unsurpassed in Canada, giving a concise and thoroughly practical course. A few months ago symptoms of kidney trouble manifested themselves, and in spite of the careful attendance and attention of his medical friends, the disease grew worse. and death terminated his sufferings on Tuesday evening, the 13th of March.

Dr. George E. Gascoigne.

Dr. Gascoigne died at Black River, Jamaica West Indies, on the 4th of February, from apoplexy. The deceased was formerly a surgeon in the British Army, and was for a considerable period stationed in Montreal. On his leaving the army he began practice in Brockville, Ontario, where he remained for several years. He subsequently moved to Panama, and then to the West Indies, where he was appointed a District Medical Officer. He was possessed of marked ability, and was much esteemed by all who knew him.

Dr. Arthur Moren, Halifax, N.S.

This gentleman died suddenly, on the 27th of February, from hemorrhage. He was a graduate of Edinburgh (1860), and occupied a prominent place among the profession in Halifax. He had been for some time in poor health, yet seemed fairly strong, when we journeyed with him from Montreal to Ottawa, early last December, as member of the Deputation to Ottawa on Public Health matters. He was genial in his disposition and had made hosts of friends.

PERSONAL.

Dr. F. W. Campbell has been elected Dean of the Medical Faculty of the University of Bishop's College, *vice* the late Dr. A. H. David.

Dr. Kennedy has been elected Registrar of the Medical Faculty of the University of Bishop's College, *vice* Dr. Campbell elected Dean.

Dr. Kennedy, Professor of Midwifery Bishops' College, has so far recovered as to partially engage in professional work.

Dr. W. T. Neilson (McGill, 1878) has been appointed Health Officer at Winnipeg, Man.

Dr. H. H. Gardner (McGill, 1878) has removed to San Francisco from West Lyn, Man.

Dr. T. W. Mills (McGill, 1878) has been appointed Demonstrator on Physiology and Histology in McGill College. He left early in March for Europe, to be absent about six months.

Dr. H. E. Chandler (Bishop's, 1880) is practising in Boston, Mass.

Dr. Wilson Fox has been appointed to fill the position of Physician in Ordinary to the Queen made vacant by the death of Sir Thomas Watson. Dr. Owen Rees succeeds Dr. Fox as Physician Extraordinary.

REVIEWS.

Note Book for Cases of Ovarian and other Abdominal Tumors. By Wm. H. Hingston, M.D., D.C.L., L.R.C.S. Edin., Surgeon to Hotel Dieu, Professor of Clinical Surgery Montreal School of Medicine, Consulting Surgeon to Women's Hospital, etc., etc. Dawson Brothers, Publishers, Montreal.

This is intended as an aid to memory in suggesting questions to the patient and to the attendant. Those relating to early history and treatment have necessarily no features of novelty; but those relating to diagnosis are gone into fully, if not exhaustively. It is in this direction that the pamphlet is most complete, and it is in this direction that difficulties are so often met with in practice. Errors in diagnosis are not so frequent now as formerly; but sometimes an unsuspected form of disease crops up to confuse and mislead. It is to this branch of the question Dr. Hingston has given special attention, and we cannot do better than quote the words of his preface:

"This Note-Book, though fuller than, will be found to resemble in many respects, that of Dr. Spencer Wells, to whom is due the credit of having first recommended the use of a separate pamphlet in each case. The order of arrangement in Dr. Hodge's excellent Note-Book has been followed. But I have added, under the head of Diagnosis chiefly, many important questions, not heretofore recorded, which will, it is hoped, aid the practitioner to avoid error by suggesting to him its possible sources."

The printing is in Lovell's best style, on thick paper, easily written upon. The wood cuts are by Walker, and do him credit.

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Original Communications.

PUERPERAL ECLAMPSIA.

By GEORGE E. ARMSTRONG, C.M., M.D.

Professor of Anatomy, Medical Faculty University of Bishop's College.

(Read before the Medico-Chirurgical Society of Montreal, April 27, 1883.)

MR. PRESIDENT AND GENTLEMEN,

The following cases of puerperal eclampsia each have some points of interest, and I think relating them may give rise to an interesting discussion on the subject.

CASE I.—Mrs. P., æt. about 30 years, delivered of her second child 4th February, 1881. Had never miscarried. About a fortnight before her confinement she consulted me, when I found, on enquiry, that her feet and ankles, her hands and eyelids were œdematous, and that there were present the three symptoms which, according to Chaussier, are premonitory indications of puerperal eclampsia, viz., cephalalgia, derangement of vision and epigastric pain. I obtained some of her urine, and found it highly albuminous. Prescribed a mixture containing pot. acet. Decoct scopar and infus. digit. As she lived in St. Lambert's I did not see her again until the morning of the day of her confinement. When summoned to attend her, I went, prepared for a case of eclampsia. I found the pains were only beginning; the os the size of a five cent piece, the parts soft and well covered with the normal secretion; rectum and bladder empty. The swelling of extremities and face scarcely perceptible. I left her for a few hours, with orders to take ℈ of chloral hydrate every hour. On my return I found that during my absence she had had what was described as a very severe convulsion. The os was now nearly fully dilated, but while examining her she said she could not see, and at once became severely convulsed. The usual tonic and clonic contractions of the muscles of the face and neck, trunk and extremities. Respiration was much interfered with, the face becoming very livid. Chloroform was at once administered, the membranes ruptured, the child delivered with the forceps. The loss of blood immediately following the extraction of the child was considerable, so much so that considerable kneading of the uterus and the application of ice to the neck of the uterus was required to control it. The placenta was partially adherent, and before she was allowed to come out of the influence of the anæsthetic, I introduced my hand and removed it. The mother made a good recovery. The child was still-born. The chief points I would draw attention to are the typical course of the case—all the premonitory symptoms of puerperal nephritis being present—and the rapidly fatal influence of the convulsions on the child.

Case II.—February 10th, 1882. At 6 a.m. I was called to attend Miss M., æt. 29 years. On arrival learned that she had already been in labour 12 hours. Upon examination I found the os fully dilated, and the head well down on the perinæum, and presenting in the second position. The membranes were ruptured. The pains occurring at intervals of two or three minutes were strong and spasmodic, each pain consisting of two strong and distinct contractions, with an intervening interval of a few seconds. The perinæum was rather rigid. She complained of a pain in the right shoulder, and of an inability to move the right arm. However, when asked to try, she moved the arm freely, and grasped my hand, though apparently with considerably diminished power. When asked if she had any pain in her head she replied that she had not. The nurse told me that the previous evening she had complained of pain and numbness in the right arm, but she had never complained of headache, dimness of vision or pain in the stomach. There was not present œdema of feet, Labia major, hands or eyelids. The perniæum dilated slowly, and the child was born at 8 a.m., the labour having lasted 14 hours. The perniæum was torn to the sphincter. The placenta was expressed 15 minutes after the birth of the child. While I was examining the placenta and the attached membranes, the patient was seized with a very severe convulsion; chloroform being at hand, its administration was at once begun. M. $\overline{xxx}$ of liq. opii Sed was injected beneath the skin, the inhalation of chloroform was then kept up, until I had sewed up the perineum. On examination I found that the cervix had been torn considerably. After the convulsion, and when the patient had partially recovered from the influence of the anæsthetic, the pulse was 68, soft and full. During the day the patient remained unconscious. She could not be roused by speaking or shaking or pinching. There was no apparent paralysis of features or extremities. The pupils were equal, and moderately well contracted. Has swallowed nothing during the day. At 9.20 p.m., and again at 9.35 p.m., she had mild convulsive seizures. At 9.45 p.m. I gave ʒ j. of chloral per rectum. Her urine was drawn off with a catheter, and found to contain about 90 per cent of albumen. At 11.05 p.m. she had another mild convulsion, after which I gave her ¼ gr. of pilocarpin hypodermically. Most profuse ptyalism followed in about 5 minutes, but no sweating. Her pulse was now 70, and her temp. in the axilla normal.

11th February, 9 a.m. Has been no return of consciousness. Lies quietly, with eyes closed, breathing normal. Urine drawn off by a catheter. Will not swallow liquids poured into the mouth. Bowels have not moved since her confinement. The pulse is 110, and the temp. 101 1-5 F. I took a rough towel, and rubbed one arm and one-half of the chest pretty thoroughly, then administered hypodermically gr. ¼ of pilocarpin, which was followed by ptyalism and pretty free sweating over the parts which had been rubbed only. Also dry cupped the back over the kidneys. At Dr. Kennedy's suggestion mustard was applied to soles of feet, calves of legs. At 6 p.m. the condition remains much the same: pulse 124 temperature 101 3-5. Tested the urine, and found only a trace of albumen.

At 11 p.m.—The pulse is 124; temperature 102. Coma deepening. No paralysis of face, neck, limbs and trunk could be made out. Ordered mustard to be applied to nape of neck and behind ears.

12th February, 10 a.m.—Her condition is worse than last night. Coma more profound; pupils small. Pulse 132; temperature 102.5 F. Pulse very small and weak.

The nurse reports that she had fourteen fits during the night. Gave gr. ¼ digitaline, and the pulse fell in 5 minutes from 132 to 116, and improved in quality. Applied two leaches to each temple; the bites bled freely, but no improvement in the mental condition followed.

At 2 p.m. I rubbed the extremities and anterior surface of body with a coarse towel, and gave ½ gr. of pilocarpin hypodermically. The sweating was considerable, and but little ptyalism. Digitaline, gr. ¼, was then administered, which improved the character of the pulse.

Dr. Wilkins, who kindly saw her with me at this visit, thought there was slight right facial paralysis, but I did not feel sure that it was present. Her false teeth had been removed, which altered the appearance of her mouth, but I could not say that it was drawn to one side. Ordered 4 oz. of peptonized beef-tea, with 1 oz. of brandy, to be thrown into the rectum every four hours.

8 p.m.—The nutrient enemata have been retained fairly well, though the bowels have been moved twice since morning. Pulse now is very shabby—130 in the minute.

T. 104 F.—Patient is deeply comatose; breathing stertorous.

At midnight her pulse was 150, has had 2 fits since 8 p.m. A hypoderm of sulphuric Ether was given but she died half an hour afterwards.

The autopsy was performed 12 hours after the death of the patient.

The brain weighed 1152 grains. The dura-mater was non-adherent. Vessels over superior surface of the brain were distended. The superior surface of the frontal lobes in front of the fissure of Rolando, was covered with extravasated blood, which extended down into the Sulci. On the left side the extravasation extended back over the post lobes. On this side, immediately behind the as. par. convolution, a dark clot was seen which measured 6c. in a transverse direction by 1c. wide, and extending down to within 3c of the fissure of Sylvius. Dr. Wilkins, whom I have to thank for kindly preserving the specimens for me, made sections of the brain according to the method adopted by Pitres. The prae front section and the pediculo-front section were normal. The frontal section contains the ant. wall of the cavity made by the clot, which involves the corticle portion to the extent of 3c. The parietal section contains the whole of the clot, which is pretty firm, and measures 4c. x 4c. The walls of the cavity containing the clot are soft and easily broken down by a stream of water. No blood effused into the ventricles.

Pediculo-parietal section normal. The kidneys were a little enlarged and pale looking. Capsules both adherent. Section shows granular condition.

I did not see this patient until she had been for some time in labour, and she had no preparatory treatment. Though from all I could learn she never had had any swelling of feet or face, had never complained of headache or pain in stomach or disorders of vision. There seemed to have been nothing to arouse suspicion of a liability to eclampsia. How far appropriate treatment, had the condition of her kidneys been recognized, might have gone to prevent her convulsions and control hemorrhage I am not prepared to say.

The diagnosis was not very clear. That there was pressure of some kind was evident from the persistent and deepening coma, but there were no symptoms by which the exact lesion and its precise situation could have been definitely told. I am inclined to think that the hemorrhage had already begun when I first saw her and she complained of the numbness in the right shoulder with loss of power in right arm.

Case No. III.—On the 15th September, 1882, I was called to see Mrs. S., æt. 35, who was in, she thought, the 8th month of her second pregnancy. Her first child was born six years ago. Has never had any miscarriages. Has enjoyed fair health, with the exception of pretty severe attacks of migraine, which occurred generally about every two or three weeks. I was told that a few hours before my arrival she had had a convulsion. During my visit I saw her have a second characteristic puerperal convulsion. There were no signs of labour coming on. The os not at all dilated. Fœtal heart distinctly heard.

The patient complains of severe headache, and is vomiting a green fluid which she says is bitter. Urine tested, and found to contain about 50 per cent of albumen. I at once gave chloral hyd. 3 i per rectum.

In this case I was fortunate in having a particularly intelligent nurse, whom I instructed to inject 3 j of chloral into the rectum immediately, whenever she noticed nervous twitchings of hands, or if the patient complained of headache, dimness of vision and epigastric pain. In this way the patient was kept for three weeks and then confined without a recurrence of the convulsions. The chloral was sometimes given two or three times in 24 hours, and sometimes two or three days would pass without any chloral.

Batley's Sed. Sol was once substituted for chloral, but the urine diminished in quantity during its use, and it was abandoned. Diuretics were given continuously, and occasionally a drastic purge, but the urine never contained less than 30 per cent albumen, until 48 hours after delivery when it did not contain a trace. It recurred, however, and did not finally disappear entirely for two or three weeks. The child was born alive, and both mother and child did well.

This case is of interest, as it bears on the question of the induction of labour with appearance of eclampsia. This woman went on for 22 days after she had had two pretty severe puerperal convulsions, and then gave birth to a living, healthy child. Again, in this case at least, the markedly uræmic slate of the mother during the last three weeks of gestation had no injurious influence on the child, as when it was born it was well nourished, and has done well since.

In the first case, after two long convulsions, the child was still-born, favoring the idea that the

death of the child is due to carbonic acid, poisoning, it in itst urn, caused by the interference in the respiration of the mother, rather than to uræmic poisoning.

Progress of Medical Science.

ON THE TREATMENT OF ENTERIC FEVER.

Although we know but little of the real nature of the poison that causes enteric fever, there can be no doubt that an organized particle is introduced into the system either by the air we breathe, or by the water we drink, perhaps in most cases water is the carrier. The infecting matter passes through the intestinal glands, and enters the blood. The poison differs from ordinary poison in the fact that it can multiply itself indefinitely. Some of the investigators in this interesting field have gone as far as to claim that they have found the germ or ferment that is the exciting cause, not only of enteric fever, but also of diphtheria, cholera and other contagious diseases. In a number of examinations microcosms were found in various organs, particularly in the intestinal glands and liver. These microscopic bodies were seen in the form of rods which are easily distinguished from the bacilli found in decomposition. The rods were not found in the organs of patients dying from other diseases. It is the opinion of recent observers that micro-organisms are the cause of enteric fever. As, however, nothing is yet certain, we must content ourselves to investigate the cause of this fever by what we can see of its effects, although our knowledge is thus limited, when we bear in mind the amazing strides that have been made by organic chemistry within the last 40 years. It would, perhaps, be within the bounds of reason to say that before the close of the 19th century the germs will be discovered causing not only enteric fever but also other infectious diseases. If the exact nature of the poison is doubtful, many of the laws governing its action outside the body are well established. We know that it does not originate spontaneously. The germ of enteric fever arises from another germ of like kind. Decomposing animal and vegetable matter in the ash-pit or water-closet may, and indeed very often does, become a nursery for it, but filth does not originate it. Epidemics of fever do not always arise in the overcrowded parts of a city; in fact, experience teaches that very often the reverse is true. When once introduced into a thickly-settled town, it generally becomes endemic in the poorer districts where poverty and dirt are inseparable. In the two epidemics where I first studied the fever it was introduced by visitors to the cleanest part of the city. Of the specific nature of the germ there can be but little doubt. That the poison is a specific matter is well demonstrated by the introduction of the fever into our district two years ago. Two Chinamen were admitted into the hospital suffering from mild typhoid; 18 days after I saw a case in a town 25 miles north of us. As the men came from a camp near this township I concluded that they had used some of the closets, thereby depositing the seed of the disease. As a number of cases followed, the camp was visited; it was found that a number of the men had been confined to their tents, sick with symptoms of fever. Most of them suffered from diarrhœa; a few passing blood. Those who were able to leave their beds walked a few yards from the tent and made a water-closet of the ground. This was in Mt. Arden Creek, which is dry in summer, but runs after heavy rain. Not far from the camp is a well which supplies the town of Quorn with water. A short time before we received the first cases there was running water in this creek, and of course all the filthy surface was washed into the well. The whole matter was reported to the proper authorities, who ordered the well to be closed and cleaned. Only five cases occurred afterwards in the town. We also know that the poison is eliminated with the fæcal discharges. This is shown by the above outbreak, for the camp was other wise clean; besides, as some of the Chinamen were sick in the steamer coming to Port Augusta, it is more than probable that the disease came from Adelaide. The poison is communicated by the fæcal discharges only. When the germ is deposited in decomposing animal matter it may multiply itself. It does not originate, however, in offensive odors. There is reason to believe that the intestinal discharges are not infectious until the process of fermentation has begun.

In sketching out our line of treatment for any disease, we should never forget that the patient is to be treated as well as the malady. A great deal may be done towards conducting the case safely through the different stages of the complaint by carefully watching the symptoms, anticipating accidents, and bringing the sufferer over critical periods. There are a number of important matters to be attended to before drug treatment is thought of, the administration of a sufficient quantity of easily digested food at regular intervals, a record of which should be kept by the nurse, economizing as much as possible the strength of the stomach and the heart. The patient should retire at once to bed and keep as quiet as possible. Failure of the pulse is to be guarded against by the timely use of stimulants. The patient is to be placed in a position favorable to recovery. The attendant should appear cheerful before the patient. I am sure that the success of the physician often depends upon the services of an intelligent nurse. We have to treat not only the symptoms seen at the usual daily visit, but often those observed by the nurse in our absence. Good nursing is attention to trifles, keeping the room clean and well ventilated, allowing the sunlight to enter, renewing soiled linen, the disinfecting and destruction of fœcal discharges by burial in the ground regularly, and order should be

observed in the sick room. The best-trained nurse is apt to prove a failure unless she is possessed of unlimited patience. Nourishment should be given every four hours or oftener. Milk and soda water when the stomach is irritable ; well-beaten eggs and brandy may often be given from the beginning of the second week, the state of the pulse regulating the stimulant. At first enough is given to make the egg palatable, towards the end of the second week, if the first sound of the heart fails, the brandy is increased. Cold water should be given freely at all times, unless one hour before or after taking nourishment, as it might interfere with absorption. If sufficient nourishment is given delirium may be prevented.

But little need be said of the expectant method. It was adopted by most physicians in the American rebellion, small doses of quinine and the mineral acids being the practice. The percentage of deaths was very high, from memory, I think over twenty-five per cent. Long marches and scanty food had no doubt reduced the men, but I am persuaded that an energetic treatment would have saved many.

When the temperature does not exceed 102° in the evening, good nursing may carry the patient safely through the disease. Even at 103°, if the functions of the skin and kidneys are fairly performed, a good percentage may recover, but when the temperature rises above 104°, for a few nights in succession, death is to be feared, unless active treatment is adopted. When the glass stands at 104° for more than four or five nights, either death or long convalescence is the almost certain result. As there are many eminent medical men who still hold to the expectant treatment, it may be asked, is there a better one? Have we a more scientific method? I believe we have—in the anti-pyretic or anti-zymotic, for they are like in their action.

If a ferment in the blood depending upon an organized germ is the cause of fever, to destroy the germ would be to reduce the temperature.

Since the external use of disinfectants has become so popular, it naturally occurred to many physicians that if carbolic acid can check the process of decomposition and multiplication of disease germs on the surface of the body, why not introduce it into the blood, where we have reason to believe a specific poison is producing fever. We know that the diseased process in phthisis is often checked for a time by the inhalation of disinfectants. Why not then introduce anti-zymotics by the stomach and rectum as well as by the lungs.

A common sense view of the treatment of enteric fever, based upon our knowledge of its cause, would favor one of the following courses :

First. To destroy the poison in the blood, thereby gradually subduing the disease by removing its cause, or, second, To protect the vital organs from the injurious effects of high tempertaure, by the application of cold water to the skin. Of the latter method I have had no experience, but for the last two years I have had good opportunity of comparing the anti-pyretic method with the expectant treatment which I practiced for many years in the States.

Since the first case was admitted into the Port Augusta Hospital, about two years ago, 163 were treated. Many of anti-zymotics were faithfully tried. If one disagreed another was used. Some patients could not take quinine in large doses. In these cases salicylate of soda acted well in medium doses. Nearly all my early cases were treated with large doses of quinine. On one occasion with nine cases of fever in hospital my supply of quinine gave out. I then began to use salicylate of soda, giving 10 gr. every three hours, day and night, until the temperature fell to 100° or less at night. The drug was then stopped until the glass marked 102°, when three or four ten-grained doses were given from four to ten at night. The temperature was thus reduced again to 100°, from which it rarely rises, convalescence usually following in from seven to ten days.

In nine cases iodine and carbolic acid were used alone. Seven of them made good recoveries in the fourth week ; in two I had to resort to large doses of quinine before the high temperature gave way. One dose of 35 grains was given every 48 hours. After three or four doses rapid recovery usually followed. Many of our cases suffered from severe diarrhœa, but were relieved by the carbolic and iodine treatment. In 34 cases quinine was used with the salicylate, for although the 10-grain doses of the soda reduced the temperature to 100°, it rose rapidly when the remedy was stopped. I found it better then to administer two or three large doses of quinine on alternate nights, then increase the doses of soda after the second dose of quinine. A fall of the glass to 98 may be expected in the morning, this is soon followed by recovery. No unpleasant symptoms are caused by these large doses, save the usual deafness when the drug is not retained by the stomach. It proves just as effectual given by the bowels. This is preferable for children. In using the salicylate of soda in the above doses, no injurious effects were observed on the kidneys. When the temperature on admission is under 104°, carbolic acid and iodine are often all the treatment required. But if the glass marks over 103° after five days' treatment, one dose of quinine of 40 grains will not only reduce the heat to 100° at night, but also ensure a distinct intermission in the morning for one or two days after. Meanwhile the acid and iodine may be continued. To secure an intermission in the morning is of great importance in the treatment of enteric fever. By this a continued fever, or more correctly a remittent fever, is converted into an intermittent. The reduction of heat in the intermission may save the patient by allowing nature to repair the destruction caused by a continual high temperature. If the patient has been intemperate I prefer the carbolic acid treatment with an occasional dose of quinine. When the patient is young and has enjoyed good health, the salicylate of soda always does well in my hands. From my experience in the anti-pyretic treatment for the last two years, I am satisfied that if the patient is seen early enough the disease may be

shortened, and when it is not shortened a long convalescence is avoided. A long convalescence is caused by the destructive effects of continual high temperature on the body, but particularly on the heart. If the glass marks 104° for more than five nights there is danger of the disease running into the fifth week, if not of death, unless there is a marked remission in the morning. It is the continual heat that destroys. But the certainty of a rapid convalescence is the least that can be claimed for the anti-pyretic treatment. The death rate is diminished very much. Of the 163 cases treated here there were 12 deaths. Of the 12, four died 48 hours after admission, two of them suffered from pneumonia. All of them traveled by rail over 150 miles. I have found that those who were sent by buggy are not so prostrated as the former. Most of my cases entered hospital in the second week of the disease.

What I claim for the anti-pyretic treatment is: 1st. That the poison is destroyed in the blood. 2d. That an early intermission is ensured. 3d. Tissue death therefore is diminished, and paralysis of the heart is avoided. 4th. The disease may be shortened. 5th. If not shortened, a long convalescence is prevented.—Wm. Markham, M.D., in the *Australian Medical Gazette.*

THE TREATMENT OF ACUTE RHEUMATISM.

Dr. Robert Bartholow (*Medical Record*): No one can give anything like attentive consideration to the types of rheumatic cases without perceiving that they may be resolved into three groups, as regards the characteristics of the individuals composing them:

1. Spare persons of considerable bodily vigor, good muscular development, and having a distinct family history of neurotic or rheumatismal disorders.

2 Obese subjects, addicted to malt liquors and good living, sometimes with—more often without—an inherited predisposition to rheumatic diseases the gelatinous descendants of albuminous parents, as they have been entitled.

3. The feeble, pale, anæmic subject, depressed by poor diet and evil hygienic surroundings, including dampness and bad air.

No one can treat cases of rheumatism successfully unless he recognizes the type before him and adapts his remedies accordingly.

The first type is comparatively frequent, and found amongst the best elements of our mongrel population. Besides the inherited tendency, such subjects are prone to indulge in a rich diet of animal food, sauces and wines, and to pursue rather sedentary occupations, or an indoor life. In these cases, salicylic acid, or the salicylate of soda, renders an incontestible service. There are, however, some practical details regarding its administration of great moment in respect to the permanency of the results. It is quite certain that in this group of rheumatic cases full medicinal doses of salicylic acid, or of the salicylates, will speedily arrest the pain and diminish the fever.

The lowering of the temperature seems to bear a constant ratio to the diminution of the pain. It is not possible to express in figures with exactitude the doses necessary: the curative effect is attained by that quantity which reduces the pain and the temperature. In suitable cases, the administration of this remedy removes all of the more prominent symptoms and establishes convalescence in three or four days. Unfortunately, in a considerable proportion of cases, the disease manifests a strong tendency to relapse, after a marked subsidence of the acute symptoms which apparently indicates the beginning of convalescence. A rule of practice has been distinctly formulated since this tendency to relapses has become well known. It is this: Give the remedy for several days after the acute symptoms have ceased. I have attempted, from my own experience, to give numerical expression to this rule, with the following result:

Salicylic acid, or the salicylates, should be given after the subsidence of the acute symptoms, and the cessation of the fever and pain, for the same number of days as the acute attack lasted. Thus, if the decline of fever and pain occurred on the fourth day, the remedy should be continued as many days thereafter, or for four days subsequent to the apparent cessation of the acute symptoms.

The second class of rheumatic subjects contains the obese, or those of full habit, the rotund addicted to malt liquors and to good living, all of whom are apt to suffer from a form of acid indigestion. The cases of rheumatism occurring in such subjects are, as a rule, much benefited by the alkaline treatment. This method is an empirical attempt to cure a disease characterized by an excess of acid in the various secretions. Dr. Fuller, the author of an excellent work on rheumatism, has been the most prominent advocate of the alkaline method.

"By the 'alkaline treatment,'" says Dr. Fuller, "I mean a plan of treatment in which alkalies play an important part, but which consists not only in the adminstration of alkalies, but in the careful regulation of the secretions, the strictest attention to diet, and the administration of tonics, such as quinine and bark, as soon as the patient can bear them. * * * My practice is to give not less than an ounce and a half of the alkaline carbonates, either alone or in combination with a vegetable acid, during the first twenty-four hours of treatment * * * More commonly two drachms are ordered to be taken in effervesence every three or four hours, in combination with an ounce of lemon-juice, or with half a drachm of citric acid dissolved in four ounces of water. At the same time, if the bowels are torpid, ten grains of colocynth and calomel pill [British Pharm.] are prescribed at bedtime. As soon as the urine, when freshly voided, ceases to show an acid reaction—which is usually the case after twenty-four hours—the quantity of

the alkali is diminished by one-half, six drachms only being administered during the succeeding twenty-four hours. At the expiration of that time, if the urine remains alkaline, three drachms only are given in the next twenty-four hours; and on the fourth day, if the urine still shows an alkaline reaction, the form of the medicine is altogether changed. The treatment ceases to be essentially alkaline; either a cinchona draught is ordered to be taken three times a day containing a scruple or a half drachm of bicarbonate of potash—a little more or a little less according to the condition of the urine, which should be kept nearly neutral—or three grains of quinine dissolved in lemon-juice is given three times a day in effervescence, with half a drachm of bicarbonate of potash or soda * * * The diet is restricted to beef-tea or broth, with soda-water and milk and barley-water as a drink, as the smallest quantity of solid food, given a day before the tongue has thoroughly cleaned, is apt to induce a recrudescence of the disease. Wine and spirits are strictly forbidden, though experience has convinced me that wine and spirits prove less hurtful than the smallest quantity of solid food." If the relation between the action of alkalies and the neurotic disturbance called rheumatism, be demanded, we are not without resources for an explanation. Pflüger's phenomena of electrotonus were long ago explained by Matteucci, and the explanation confirmed by Becquerel on the ground of the chemical action developed by the passage of the current. Humboldt was the first to show that the excitability of a nerve is increased by contact with an alkaline solution, and diminished by contact with an acid solution. Now, as the condition called rheumatism may signify a depressed state of the trophic functions, the good effects of alkalies are at once apparent—that is, the increase of the functional activity—and thus counteract the depression. The third type of rheumatic cases, and numerically the most important—probably, also, pathologically, the most serious, is the feeble and anæmic subject. A rheumatic of this kind is pale, rather thin, the muscles weak and wanting in firmness, the chest narrow and somewhat flat, the joints prominent and lax. In such persons an extension of the rheumatic inflammation from joint to joint, until almost all the joints of the body are involved, is to be feared, as it is of frequent occurrence. Cardiac complications are relatively frequent. It need hardly be observed that in such subjects the depressing effects of salicylic acid and of the alkalies are to be dreaded. Here clinical experience is in entire accord with theory. We owe to Dr. Russell Reynolds, of London, the introduction of a remedy for acute rheumatism, which is especially suited to this group of cases. I refer to the *tincture of the chloride of iron*. To be effective it must be given in full doses—from ʒ ss. to ʒ j. in sufficient water every four to eight hours. It lessens the swelling and pain of the joints, lowers the fever, diminishes the tendency to heart complication, and, above all, sustains the vital powers in their struggle againts the encroachments of the rheumatic disease. I am far from denying that cases of rheumatic fever in these anæmic subjects would not be relieved by salicylic acid, but I do affirm that so much depression would result that relapses would occur, and the convalescence would be prolonged owing to the remarkable depression of the nutritive functions. The same state of things results from the administration of alkalies. The blood is despoiled, the heart enfeebled, and complications of various kinds invited. On the other hand, very conspicuous benefit results from the vigorous administration of the tincture of iron. Besides its influence over the course of the disease—shortening its duration by checking waste, and preventing complications by maintaining the vital resources—the tincture of iron, as shown by the late Dr. Anstie, has a distinct prophylactic effect, so that, when an attack is threatened, it will, by timely administration, prevent it. During the period of convalescence from acute rheumatism, after the treatment by salicylic acid and by alkalies, the tincture of iron in the full doses already advised renders an important service. The tenderness and effusion about the affected joints, the subfebrile temperature, and the condition of anæmia, are alike greatly improved by its administration in efficient doses. I have repeatedly observed that cases which lingered long on the hands of the physician after the acute symptoms had subsided, quickly improved and recovered when efficient doses of the tincture of iron were administered, and, at the same time, suitable blisters were applied to, or about, the affected joints.

Independently of the considerations above expressed regarding the utility of blisters, the "blister treatment" of acute rheumatism is deserving of careful consideration. Blisters in various ways, and applied in accordance with various notions, have long been used in the treatment; but the "blister treatment," properly speaking, of acute rheumatism has been systematized by Dr. Davies, of the London Hospital, and Dr. Dechilly, of France. The latter, however, applied a large blister to cover the joint, and permitted it to remain on until sufficient inflammation occurred to produce abundant serosity. Dr. Davies, on the other hand, was content to apply the blisters around rather than on the joint itself. It is a remarkable fact that blistering brings about a neutral or alkaline condition of the urine, how acid so ever it may have been before the blisters were applied. More or less strangury occurs in some instances. So remarkable is the relief to pain produced by the blisters that patients petition for their renewal from time to time. Cardiac complications are comparatively infrequent, and the duration of the disease is reduced to the limits of the favorable cases. Indeed, I may sum up the testimony as to the efficiency of this method in the words of Dr. Greenhow, who affirms that the treatment of rheumatism by blisters is quite as successful and less objectionable than by salicylates.

The good effects of the blister treatment afford a strong justification of the neurotic theory. When

first ascertained, the result was ascribed to the withdrawal of a quantity of acid serum from the neighborhood of the affected joints. The change in the character of the urine, induced by successive blisters, rendered further explanation necessary. The increase of our knowledge respecting the influence of peripheral irritation on the state of the nerve-centres, and especially on the trophic system, has paved the way to a better appreciation of the facts ; nevertheless the final explanation remains to be made.

A combination of the blister treatment with salicylic acid, with alkalies, or with the tincture of iron, may often be made with signal advantage.

The importance of a proper diet is not less than is stated by Dr. Fuller in the quotation made from his paper. Solid food should not be allowed in any case. Liquids composed of starchy and saccharine matters are only less hurtful. Milk and animal broths are the articles to be depended on chiefly until the cessation of all joint troubles will permit the gradual restoration of a solid dietary. Lemonade and carbonic acid water are allowable, unless they produce flatulence, when they will excite fresh joint mischief. Anodynes are to be avoided if possible ; when necessary, atropine is preferable to morphine, if adequate to relieve the pain, which it usually succeeds in doing. The complications which may arise in the course of rheumatic fever demand more careful treatment than I can give them at the conclusion of this article.

CASE OF ECZEMA OF NIPPLE AND AREOLA : WITH DIAGNOSIS.

By Alexander Napier, M.D.

In dealing with skin affections of the nipple and its immediate vicinity, it becomes one's duty, in view of the investigations of Paget, Butlin, Thin, and others, to distinguish at as early a period as possible between simple benign disorders and those which are either of cancerous nature from the outset, or likely to lead to the development of cancerous disease in the breast. But this is not always easy, the appearances noted in the recorded cases of " Paget's Disease " being extremely variable, offering no sign or group of signs pathognomonic of the affection. The details of the following case, one of simple mammary eczema of old standing, cannot be without interest, as showing that long duration is not of itself to be taken as an indication of malignancy of character in such cases.

Mrs. D., healthy looking, Feb. 15, 1882, obstinate eczema of 2½ years', affecting the right nipple and a portion of the areola. Disease began just a month before the birth of last child, the first step being the occurrence of suppuration above and to the inside of right nipple. This abscess was allowed to break of itself. When her child was born no milk appeared in the affected breast, but a week after confinement the breast suppurated again, the swelling breaking and discharging a little. By this time the eczematous condition now to be described had established itself. The eczematous patch was found to be nearly circular, about two inches in diameter, and so placed that its lower border passed just under the nipple, from which the disease extended upward and toward the middle line. The surface was covered with light scabs or crusts, underneath which was found a reddish excoriated surface with a thin serous discharge. Round the base of the nipple, on its outer and upper aspects, ran a deep crack or fissure. The patch was pale purplish red in colour, slightly thickened and infiltrated, decidedly itchy, but almost painless, and with no feeling of burning. It had a well marked, raised edge. There was no hardness of the neighboring parts of the breast, no retraction or diminution in size of nipple, and no enlarged or indurated glands could be detected in the axilla. The scars of the abscesses which were said to have formed and burst on the site of the eczema could not be found. Patient had no record of treatment, but stated that many applications, chiefly ointments of various kinds, had been tried, but with no good result, the eczema having remained in practically the same condition during nearly the whole period of 2½ years. Feeling uncertain whether this was a case of simple chronic eczema or of disease of a graver character, I determined to treat it for a short time on the former assumption, and ordered the frequent application of zinc ointment, vaseline, and pitch. March 1, it is noted that the crack was healed, and that the patch looked much better, was softer, and more nearly of its natural color. March 18, patient returned showing the nipple and areola in a perfectly healthy condition, the skin being sound and supple, though slightly darker in color than the areola of the other breast. She departed promising to come back if the disease reappeared. I have not seen her since.

Bearing in mind the result of treatment, there can be little doubt that this case was one of simple chronic eczema of the areola and nipple, a disease which, occurring apart from the period of lactation, is of itself sufficiently rare to be interesting, as, out of 704 cases of eczema which have come under my notice during the last three years and a quarter, this case and another are the only instances in which the region named was affected. Mr. H. Morris states that of 305 cases of cancer of the breast he had seen, from 1872-77, only one was preceded by eczema ; and that of eight cases of eczema of nipple, not one was followed by cancer.

The question of diagnosis forced itself on the attention here at the very outset. It is quite possible that the long continued irritation of an eczema of the nipple may occasionally give rise to cancer of the breast, just as a persistent irritation is known to cause malignant disease in certain

subjects: the occurrence of cancer after ichthyosis or syphilitic disease of the tongue furnishes a parallel instance. Mr. Henry Morris also, has recently put on record a case in which a small patch of eczema of the skin of the neck, remaining unchanged in character for five years, led in the course of four more years to the development of cancerous disease in the subjacent tissues on being irritated mechanically and by the application of caustics. But even such facts make it not the less a matter of urgency that the benign or malignant nature of any skin affection in the neighborhood of the nipple should be promptly recognized, particularly if Thin's view is correct, and I believe it is, that "Paget's disease" is no eczema, but malignant from the first.

In looking through the literature of the subject, not even now very voluminous, little aid is obtained towards the formation of a diagnosis. Much stress is usually laid on the *duration* of the disease, but this will be found to vary within strikingly wide limits. Thus, in Paget's original 15 cases, "cancer of the mammary gland followed within one year." In Butlin's first case the disease is said to have been simply "of long duration;" in the second it had lasted three years; and in his other two cases, examples of undoubted hard carcinoma, the eczema had preceded the appearance of breast tumor by about *two weeks* and three years respectively. In other recorded cases (Thin, M'Naughton Jones, Heywood Smith, C. B. Porter, Morris, Munro, and others) the period which had elapsed from the appearance of the "eczema" till the development of mammary cancer varied from about one year to six. Dr. C. B. Porter said: "The only guide for interference when the cancerous degeneration is not manifest is the duration. An eczema of the breast of long standing should be removed. He would consider it chronic after a year's duration, and advise excision." It seems quite clear, then, that if eczema of the nipple may precede the appearance of cancer of the gland by only a fortnight in some cases, and by a period as long as six years in others, duration *per se* cannot be depended on in making a diagnosis. In the case here related the disease had lasted 2½ years, and turned out to be simple eczema after all.

The descriptions given of the *appearance* of the parts affected are not less variable. In some cases the diseased surface was "intensely red, raw, finely granular," this being limited to the areola; in others it presented the characters of an ordinary chronic eczema, with minute vesication, succeeded by soft, moist, yellowish scabs;" occasionally it has been "like psoriasis, dry, with a few white scales slowly desquamating," this spreading far beyond the areola. In one instance "the nipple had melted away, leaving a hole, the part presenting "a foul depressed ulceration," and this lasted for four years before the appearance of any breast tumor; in another the nipple disappeared, leaving a circular superficial ulceration, surrounded by eczema, having a sharply defined border; in others, the patches were hard, raised, uneven, scabbed, and showed simply "a very chronic eczema, apparently of ordinary nature." The nipple is spoken of as being sometimes "slightly retracted," depressed, or absent, while its site is occasionally occupied by a depressed ulceration. Pain is generally slight, though in one instance it became severe and stabbing as the breast tumor was forming. In short, a perusal of the literature of the subject has convinced me that at least two conditions have been included under the term "Paget's disease," the one a true cancerous condition, the other a simple chronic eczema. A part which is raw, granular, ulcerating, leading to the melting down and disappearance of tissue, cannot be said to be simply in an eczematous state; while, on the other hand, a superficial skin affection, with all the appearance of eczema in various stages of chronicity, lasting without appreciable change for many years, and often curable, cannot be set down as cancerous, though such conditions may be followed by malignant disease in a longer or shorter period, varying with the constitutional predisposition of the subject.

Regarding the curability of superficial skin diseases, which if left alone would infallibly develop into true cancer, Prof. W. Busch, of Bonn, records some most interesting experiences which have a direct bearing on the point. He first gives his views as to the manner in which epithelial cancer of the face and lips develops. The first step in the process he states to be a simple hypertrophy of the corneous epidermis on the very surface of the apparently healthy skin. Then a thick scurfy crust forms, falls, or is picked off, re-forms, is again removed, and so on till ulceration takes place. The epithelial elements pass downwards through the connective tissue, infecting the bones, glands, and other parts, and constituting true cancer. But this process often remains stationary for many years in its first stage, that of epithelial hypertrophy: in this stage it is not true cancer, and is curable by suitable treatment. He suggests that the hypertrophied epidermis offers simply *a mechanical* obstacle to the shedding of the rapidly formed corneous epithelium, preventing its progress outwards, and forcing it to grow inwards through the connective tissue; at any rate, he finds that when this mechanical obstacle—the scurfy crust—is removed, and is not permitted to re-accumulate, the process stops short of the inward growth of epithelial structures, and the cancer is held in check. This he accomplishes by the systematic use of alkaline solutions. To soften off the crusts he applies a 1 per cent. watery solution of soda, or, if the crust be very thick, a 1 to 40 solution: then the skin has afterwards to be washed daily several times with a 1 to 200 solution, to prevent the reformation of crusts. This has to be kept up during the rest of the patient's life, as if it be interrupted the epidermis begins at once to gather

again. After operations for cancer he causes the patient to wash the scar with this lotion, and finds that this makes relapses very much rarer, though of course, in case of very extensive malignant disease, if cancerous tissue be left behind it will grow towards the surface, and here such a lotion is of no use. Some cases are then given bearing out these views. In one instance in particular the patient had been operated on 15 years before for cancer of the face; for years he used the alkaline lotion, and remained free of disease; then he stopped using the lotion, when the disease in its original form began to appear; on resuming the application this gradually passed off, and the part remained well. Dr. Busch then asserts that this mode of treatment cures epithelioma of the lip, so long as this is simply in the stage of crusting, of epithelial hypertrophy; but it has no effect after ulceration has occurred in this situation. On other parts of the face it will sometimes effect a cure even after ulceration has taken place, and the author gives two cases illustrative of this event. Prof. Busch then refers to Paget's well-known paper in the tenth vol of *St. Bartholomew's Hospital Reports*, and in this connection the interest of the paper lies chiefly in the relation of four cases of breast tumor, in which the nipple was effected. cured by means of his alkaline treatment. In case 1 there was a painful mammary tumor, but no enlargement of the axillary glands. On the nipple was a thick layer of warty-looking epidermis, and on the nipple of the sound side a little of the same was noticed. On softening and raising the crust there issued from the nipple a thick, yellowish-white plug, like a comedo, or such as may often be expressed from epithelial cancer, this plug consisting of epithelial cells which had undergone fatty degeneration. The washing was continued, the tumor disappeared, and in two months the patient was well. In two other similar cases the same treatment gave equally favorable results. In the fourth case the tumor was an inch and a half in diameter and of extreme hardness; here also the epidermis of the nipple was much thickened. The soda treatment caused the complete disappearance of the tumor, the first application being followed by what the patient described as "a discharge of thickened milk." Another smaller tumor formed at another part of the breast, and this was still under treatment. The author concludes by stating that he had seen many cases of mammary cancer in which the nipple was unchanged, except that it showed the usual retraction. In many other instances, however, the nipple was found more or less crusted with thick epidermis. In these more recent cases he had not had the same success in arresting the growth of the tumor by the alkaline treatment, even in cases in which epithelial plugs were expressed.

The author, writing in 1877, mentions incidentally that some years previously, and apparently before Paget, the first of these four cases suggested to him the idea that the growth of the breast tumor may have resulted from closure of the milk ducts by cellular masses, though in 1864 he had described the process as following the reverse course, supposing that the carcinoma, starting from the point primarily affected, spread along the epithelium of the ducts to other parts of the gland.

I have quoted Busch's paper at some length on account of the important bearing it has on the discussion of the probable origin of mammary cancer after disease of the nipple. The method of treatment described is also well worth bearing in mind in dealing with cases such as he refers to; and as this epidermic crusting of the nipples is common enough in the old, and even among the middle-aged, the possibility of its leading to cancer should never be forgotten. Volkmann recommends the alkaline treatment in hyperplastic conditions, the result of simple chemical irritation, especially such as are chronic and associated with general thickening of the epidermis. Dr. S. W. Gross also, besides referring to two cases of "Paget's disease" he had seen, mentions one in which Busch's treament was successful. Further, Dr. T. Chambers records two cases in which eczema of the nipple had lasted 9 and 18 months respectively, the nipple being retracted, flattened, fissured, and the breast enlarged, nodular, and painful; "the neighboring lymphatic glands were similarly affected." In these cases attention to uterine disease, which was present in both, and the local application of tincture of opium and glycerine, promptly effected a cure, the breasts assuming quite their normal appearance. And Dr. R. Munro has reported a case of true eczema of the nipple and areola, which became perfectly well under ordinary treatment.

Such cases, then, as show open foul ulceration, are unquestionably already cancerous, and the surgeon's duty in regard to them is plain. There seems also to be no necessity for applying the name "Paget's disease" to such cases. Of the other cases which have been recorded, many of them were obviously, for a period of years at least, simple eczema, and nothing else; and to these also, especially in their early stages, the name "Paget's disease" appears to be equally inapplicable. There remain other cases, however, separate from these, and to such the new term proposed is appropriate; cases simulating eczema, but associated with or closely followed by true malignant disease of the breast. If tumor of the breast be present, the diagnosis is plain, and the surgeon's course equally so. But how is the really malignant character of such cases to be recognized while there is yet no tumor? Duration simply is no very reliable guide. And in regard to appearance, the only diagnostic sign which has so far been suggested is the presence of a well-defined, overlapping margin, "forming a veritable ridge with a sulcus behind it." This, when it is present, is doubtless a valuable indication, and if it were associated with a red, raw surface, which was obstinately rebellious to ordinary treatment, then the interference that Thin's "malignant papillary

dermatitis" existed would be warranted. Such a ridge is not common in simple eczema, the infiltration which accompanies that disease shading off gradually into the sound tissues, as a rule: in the case I have described, however, there was a well marked and distinctly elevated margin, and one occasionally notices the development of a firm base and well defined edge in patches of chronic eczema, when treated by strongly stimulating applications. Even cases in which this ridge is wanting should be closely watched; and if they resisted vigorous treatment, removal of the affected part and the gland tissue immediately subjacent would be indicated, more especially if tendency to cancer were known to exist in patient's family. —*Glasgow Medical Journal.*

A NEW DEPARTURE IN THE TREATMENT OF RHEUMATISM AND GOUT.

In the *British Med. Jour.*, Dr. Alexander Harkin presents an article in which he first points out the unsatisfactory state of our knowledge concerning the etiology and therapeutics of these two diseases, and afterwards condemns the now recommended salicylate treatment, and then goes on to recommend an entirely new treatment of his own. He says :—

"My object is not so much to call attention to the epidemic of salicism, from which, apparently, the medical mind is at present suffering, as to proprose a new and effective remedy for acute rheumatism, which, in my practice and in that of other professional friends, has afforded results as yet unequaled in the treatment of that disease."

The following case will give a good idea of his method of treatment :—

On October 24th, 1879, I visited sub-constable H., aged 30, married. He had a rigor on the 21st, followed by pain in the left knee and thigh, which were now red and swollen. On the 25th pain had extended to the right knee, both ankles and shoulders. On the 26th the left elbow was also affected; perspiration was acid and profuse; his urine scanty and loaded with urates. On the 27th his state was unchanged. I ordered an opiate at bedtime. He had been previously laid between blankets, and his joints enveloped in cotton-wool. On the 28th he was no better; he had not slept for a week. At 1 P.M. his temperature was 102°, pulse 108. No cardiac affection was perceptible. I then applied a blister, four inches by three, over the region of the heart, to be replaced with cotton-wool at the end of eight hours. On the 29th I found the patient completely relieved. His countenance was cheerful, his tongue clean, thirst diminished, perspiration gone, urine copious and clear, temperature 98°, pulse 90. He told me that he began to feel relief at 6 P.M., just five hours after the application of the blister; that soon afterwards he fell asleep for the first time for many days; and that, having had occasion to rise in the night, he walked unaided across the floor, and only remembered his pains after getting into bed. And thus, although on the previous day paralyzed in every joint, he was now able, without pain, to flex and extend them all, and to sit up in bed with ease. On looking at the joints, every trace of redness had departed, and the swelling was very much diminished, and they could be grasped firmly without pain. On the 29th and 30th he was still improving. Pulse 90, temperature normal. The swelling and pain were absolutely gone from every joint. On November 1st the pulse was 84, temperature normal. Convalescence was complete, and my visits terminated. A week later he walked to my house, a distance of half a mile, and he soon afterwards returned to duty.

He then goes on to say that it is now generally admitted that the exciting cause of acute rheumatism, as of pleuritis or pneumonia, is a chill; and that the effect is produced through the medium of the nervous system; and that, although the integument alone may be directly chilled, the deeply seated internal organs also suffer. The immediate effect of cold upon the nerves of the surface is to lower their functional activity, and to increase the action of the nerves of the internal organ in relation with that part; endocarditis thus becoming the first step in the development of acute rheumatism after exposure to cold. If it be physiologically true that, when two parts of the same body are nervously in sympathy with each other, if we produce a powerful action in the nerves of one, we may withdraw vital energy from the nerves of the other; then it follows that, when a derivative in the form of a blister is applied in the nearest vicinity to the endocardial lining when in an inflamed state, it is but carrying into effect the principle that counter-irritation is the most effective plan available to alter the excited condition of nerve-centres, and so to influence motor, sensory, and trophic nerves. Further, if experience tell me that counter-irritation over the heart is a potent remedy for the cure of acute rheumatism in all its phases, this fact will surely throw light on the nature of that disease. According to Dr. Peter Latham, "the treatment of diseases is in fact a part of their pathology. What they need and what they can bear, the kind and strength of the remedy, and the changes which follow its application, are among the surest tests of their nature and tendency." And Cullen, in the preface to his *Nosology*, page 16, says that "remedies cure diseases only in so far as they remove their proximate causes." When, therefore, a blister over the region of the heart cures endocarditis and its articular complications, it would surely not be unsafe to infer that the proximate cause is located in the heart itself. If, then, it can be satisfactorily established that acute rheumatism may be cured by a topical remedy alone, what becomes of all the theories based on the idea of its zymotic, its con-

stitutional, or autogenetic origin, and the sundry modes of treatment, and the antidotal remedies devised for the removal of the hypothetical condition of the vital fluid—eliminative, antacid, or otherwise? That it may be done—that it has been done in a number of cases—I have satisfied myself, and knowing how prone human nature is to self-deception, I have guarded against the personal element by inviting the presence and co-operation of several medical men of the highest ability and scientific acquirements as witnesses.

My chief desire is, that my simple plan for the cure of rheumarthritis shall be thoroughly tested by the profession at large; of its efficacy, my own experience, and that of a number of my professional brethren, assures me. I cannot expect, however, that every one who may be equally convinced by personal trial and experience, shall also accept my explanation of its *rationale*. The pathology and physiology of the nervous system are not yet established on sure grounds; its supposed laws are subject to many contradictions, which only a more extensive knowledge of its principles, and their application, can elucidate. Nor would I wish to appear as proclaiming its efficacy in every case. I am satisfied, indeed, that endocarditis will still claim a place in the sad category of fatal diseases; but I also feel that, in cases possible of cure, the abortive plan proposed must claim precedence as the most rapid, safe, and permanent; from its very nature, the most potent to anticipate or remedy functional or organic disorder in the heart and its appendages. One other important result is likely to flow from its general adoption, viz., the reduction to very moderate dimensions of that class of applicants to whom the physician has so often reluctantly to refuse the benefits of life insurance, on account of the existence of permanent cardiac injury, caused by undetected lesion in cases of ordinary acute rheumatism.

A NEW TEST FOR ALBUMEN IN URINE.

Dr. Wm. Roberts thus writes in the *Lancet*: When an albuminous urine is treated with a saturated solution of common salt, not the slightest reaction takes place; but if the brine be slightly acidulated with hydrochloric acid, the albumen is thrown down as a dense white cloud. This reaction constitutes a most delicate test for albumen in the urine. The best degree of acidulation for this purpose is obtained with about 5 per cent. of the dilute hydrochloric acid of the Pharmacopœia. A little more or a little less acid makes no appreciable difference in the sensitiveness of the test. Common salt dissolves in about two and a half times its weight of water at 60° F., and increase of temperature does not sensibly increase its solubility. The salt of commerce is always more or less dirty, and the solution requires filtration to fit it for use as a test. The salt solution should be fully saturated, otherwise the observer is apt to be led into error. In preparing the test with our common English measures the readiest plan is to mix a fluid ounce of dilute hydrochloric acid with a pint of water, and to saturate this with common salt, and filter. Dilute hydrochloric acid may be replaced by dilute sulphuric, dilute nitric, or dilute phosphoric acid. All these acids are of the same saturating strength in the British Pharmacopœia, and all of them yield, with saturated salt solution, an equally sensitive reagent for albumen. Even acetic acid may be used, but the delicacy of the test in that case is not quite so great as when it is prepared with one of the mineral acids. The method of applying the brine test is similar to that followed with nitric acid. A portion of the suspected urine is placed in a test-tube, the test-tube is then held very much aslant, and the salt solution is allowed to trickle along the sides of the tube to the bottom, so that it may form a distinct layer below the urine. If albumen be present, a white-cloudy zone appears at the junction of the two fluids. Or the proceeding may be reversed. The salt solution may be first introduced into the test, tube, and then the urine added, with the same precautions as before, so as to obtain two distinct layers, one above the other, in the test-tube. It is important to be aware that the precipitation of albumen by acidulated brine is not due to a true coagulation. In this respect the brine test differs from nitric acid and boiling. In the two latter cases the albumen is transformed into the insoluble modification, which is known as "coagulated albumen." But when albumen is thrown down from urine by acidulated brine the precipitate is not insoluble; on the contrary, it is redissolved by free addition of water, or even by free addition of the albuminous urine itself. It is therefore essential to the efficient application of the test that the salt solution should be in excess at the point of expected reaction. This end is obviously secured in the above-described methods of testing. It may also be secured by adding to the suspected urine a volume of the salt solution at least equal to that of the urine in the test tube. If this point be not attended to the test is unreliable. For instance, if acidulated brine be added, drop by drop, to an albuminous urine, and the mixture shaken up after each addition, the first few drops either occasion no turbidity whatsoever or the turbidity produced disappears on shaking. But when by successive additions the quantity of brine approaches to or surpasses the volume of urine operated on, the turbidity remains permanent. In point of delicacy the salt test stands on a par with nitric acid. The minutest trace of albumen detectable in the urine by nitric acid is also detectable with equal ease by acidulated brine. In high-colored urines the brine test is distinctly superior. In this class of urine nitric acid produces a deepening of the tint, with, often, a disengagement of gas, which interferes with the sensitiveness of the reaction, but the brine test neither alters the tint nor causes disengagement of gas. On the other hand, I think that nitric acid gives a better idea of the quantity of

albumen present by the density of the white cloud produced than does the brine test. In addition to albumen, acidulated brine precipitates peptones, which are sometimes present in urine; so that occasionally a slight cloudiness is produced by the salt solution where nitric acid and boiling (which do not precipitates peptones) produce no reaction. This distinction in the action of the brine test may hereafter lead to interesting information. In dense urines, highly charged with urates (but not containing albumen), the addition of nitric acid sometimes throw down the amorphous urates in the form of thick white clouds, and it is necessary to apply heat to distinguish with certainty the cloudiness so produced from cloudiness due to albumen. The salt test does not throw down the urates in this way. It is well known that the urines of patients who are taking large doses of resinous substances (such as the resin of copaiba), although free from albumen, yield a cloudiness with nitric acid in the cold, but if the urine be previously made hot, nitric acid produces no such reaction. This difference serves to distinguish cloudiness due to resin from cloudiness due to albumen. The brine test also produces a cloudiness in resinous urines, and the reaction occurs whether the urine be hot or cold. To avoid the fallacy thereby arising, all that is necessary is to add an excess of the urine which is being tested. If the cloudiness be due to albumen it disappears on such addition, but if it be due to resin the cloudiness does not disappear on the addition of more urine. One of the chief advantages of the salt test is its incorrosive character. It does not stain nor burn holes in garments and carpets, nor fleck the hands with yellow spots. The use of it makes it possible to arrange a pocket-case for urine testing that shall not be a terror to the wearer. From this point of view the substitution of the salt solution for nitric acid will be a real boon to practitioners. * The salt test has this additional convenience, that it enables us to test successively for albumen and sugar on one and the same sample of urine. The suspected urine is first tested for albumen with the salt solution, and then Fehling's solution, or, still better, a pellet of the solid Fehling's test sent out by Cooper, is added, and heat applied. After boiling a few seconds the absence or presence of sugar is ascertained. The admixture of the brine in no way interferes with the copper reaction, in case sugar should exist in the urine.

* I have carried about with me for some months past a little pocket-case (which is only a stiff-back cigar case) which I have found a useful and safe clinical companion. It contains a book of litmus papers; a narrow corked phial filled with acidulated brine; a test tube charged with Cooper's pellets of the solid Fehling's test, guarded with an india-rubber stopper; and, lastly, an empty test-tube, also provided with a cork. This compact arrangement furnishes the means of ascertaining the reaction of the urine, and of testing it in the most delicate manner for albumen and sugar. The empty test tube also serves to carry home a specimen of the urine for further and more minute examination. The "pellets" (made after a suggestion of Dr. Pavy) are sent out by W. T. Cooper, chemist, 26 Oxford street, London.

CEREBRAL DYSPEPSIA.

By John S. Main, M.D.

The author strongly insists on the purely cerebral origin of many forms of dyspepsia, where the patient is neither over-indulgent, nor intemperate, nor addicted to hurrying over meals, nor accustomed to eat coarse or unwholesome food. The cerebral form of dyspepsia is well seen, in many cases, were a healthy man, with a good appetite suddenly receives bad news when sitting down to a meal. "But, perhaps, of all conditions acting on the brain in this manner, and through the brain on the stomach, no one is more injurious, or more jarring to the cerebral elements, than uncertainty, and the worry caused by the same, more particularly in preternaturally irritable subjects. In fact, it is in connection with this same worry that the form of dyspepsia I have at present under consideration most frequently occurs. The mind, in such cases, preys upon itself; the cerebral elements seem to get jarred and out of gear: and with this condition the stomach sympathises. But in addition to worry the habitual practice of calling into action the 'reserve fund' of the cerebrum, as already mentioned, will bring about the same consequences—namely, cerebral fatigue and exhaustion, indicated chiefly by preternatural irritability; this condition, sooner or later, telling upon the digestive organs. Having said this, it is almost unnecessary to add that such cases are most commonly met with amongst those who are engaged in the hottest part of the 'battle of life,' or 'struggle for existence'; and, again, amongst these, chiefly those whose business or profession leads to much anxiety, uncertainty, or over-stretching of the mental powers. In over-aspiring, over-ambitious natures 'hope deferred' may bring about the same results; as, according to the biblical expression 'it maketh the heart sick.' My attention was drawn to several cases of dyspepsia, connected with one or other of these conditions, some time ago; and what made me more strong in my view of these cases being cerebral, and not stomachic at all in their origin, was their obstinacy under all forms of natural treatment. Latterly I have found that the only treatment capable of doing these cases any permanent good is a change, in the wide sense of the term—a relaxation from business or study; and, as regards medicines, not such as are meant to act on the stomach directly, but those meant to act on the cerebrum. Amongst these I have found the most useful to be the bromide of ammonium, or bromide of potassium —preferably the former—given in a sufficient dose at bed-time, to secure a good night's sleep, this being often very indifferent, and so tending to complicate the case; and, combined with this, to be taken three or four times during the day, such medicines as are known to have a building up effect on the nervous system. Amongst these, the most useful being phosphorus, or the hypophosphites, and cod-liver oil. Arsenic and quinine

are often also useful, and a generous diet is always indicated. Unless the stomach has passed into a state of disease (which it may do, if overtasked when in this weakened state), any of these medicines are generally well borne. It will be well to bear in mind, however, that if the mucous membrane of the stomach be in a state of irritation, quinine, arsenic, phosphorus, the hypophosphites, and sometimes even cod-liver oil, are generally inadmissible."—*British Medical Journal.*

ON THE THERAPEUTIC VALUE OF SULPHUROUS ACID IN SCARLATINA MALIGNA.

Dr. Keith Norman Macdonald, after denying the prevalent opinion that no reliance can be placed on any drug in cases of scarlatina, does not hesitate in affirming that, when properly applied, both locally and internally, sulphurous acid is by far the most efficacious remedy we possess. He continues: "I have had several opportunities of testing its efficacy in some of the worst cases I have ever seen, during the epidemic which has been rife in this town (Cupar Fife) for the last two months, and I am bound to say that, of all remedial measures in this disease, it is, in my opinion, the most reliable. My treatment is as follows. The moment the throat begins to become affected, I administer to a child, say of about six years of age, ten minims of the sulphurous acid, with a small quantity of glycerine in water, every two hours, and I direct the sulphurous acid spray to be applied every three hours to the fauces for a few minutes at a time, by using the pure acid, in severe cases, or equal parts of the acid and water, according to the severity of the case. Sulphur should also be burned in the sick chamber half a dozen times a day, by placing flour of sulphur upon a red hot cinder, and diffusing the sulphurous acid vapour through the room, until the atmosphere begins to become unpleasant to breathe.

"In the worst cases, where medicine cannot be swallowed, this and the spray must be entirely relied upon; and the dark shades which collect upon the teeth and lips should be frequently laved with a solution of the liquor potass permanganatis, of the strength of about one drachm to six ounces of water, some of which should be swallowed, if possible.

"In cases presenting a diphtheritic character, the tincture of perchloride of iron should be administered in rather large doses in a separate mixture with chlorate of potash, and equal parts of the same with glycerine should be applied locally, with a camel's-hair brush several times in the day; but, as in the majority of cases among children, it is next to impossible to use a local application more than once; the spray and permanganate solution will then prove of great service.

"As to other remedies recommended by various authors, ammonia is nasty, and cannot be taken well by children; carbolic acid has the same fault, and cannot be applied properly. Gargles are also useless in children, because they seldom reach the diseased surfaces, and warm baths and wet sheet packing are dangerous, because they are never carried out properly in private practice. The hypodermic injection of pilocarpine is a remedy that may give good results hereafter, but I have had no experience of its use."—*British Medical Journal.*

DISLOCATIONS OF THE THIGH REDUCED BY NEW METHODS OF MANIPULATION.

In cases where reduction of the femur by manipulation, in the usual way, with the aid of anæsthetics, has failed, or is inapplicable, and as a substitute, in many cases, for anæsthesia, assistants, and mechanical power, Mr. Kely (*Dublin Journal of Medical Science*, October) proposes the following methods:

For posterior dislocations.—The patient is laid prostrate upon the floor. Three strong screw-hooks are inserted into the flooring close to the perineum and each ilium of the patient, and to these hooks he is secured by strong bandages or rope. The injured thigh is flexed at right angles to the patient's body: the foot and lower extremity of the tibia are placed against the perineum of the surgeon who, bending forward, with the knees slightly flexed passes his forearms behind the patient's knee and grasps his own elbows. Reduction is now accomplished by drawing the femur upwards; but circumduction may also be practised; the surgeon, stepping backward, then extends the limb, and lays it by the side of its fellow. In sciatic dislocations, in order to liberate the head of the bone from the foramen, a bandage may be passed around the thigh, close to the trochanter, by which an assistant may make traction.

For anterior dislocations.—The patient is placed upon a table of such elevation as to have his pelvis nearly as high as the trochanter of the surgeon. A bandage around the pelvis, and secured to the side of the table farthest from the dislocation, affords counter-extension. The surgeon, with his face directed towards the dislocated joint, and standing on its inner side, with his trochanter pressed against the femur, now bends the leg behind his back, and grasps the ankle with the corresponding hand. Reduction is effected by rotating or turning his body partially away from the patient, thus making traction on the femur in the most favorable direction, and at the same time pressing its head towards the acetabulum with the disengaged hand

DIALYSED IRON.

Many have been the discussions relative tc Dialysed Iron ; the matter has come under repeated investigation at pharmaceutical meetings ; and, as far as mode of manufacture is concerned, little, perhaps, remains to be learnt. But two different theories have been maintained : one, that Dialysed Iron possesses merits which set it above all other liquid forms of iron ; the other, founded probably on its want of astringency and slightly perceptible taste, that its claims as a therapeutic agent are questionable in the extreme.

Dr. Prosser James, in a late original communication in the *Medical Times*, appears to have given an impartial summary of the position which Dialysed Iron is entitled to hold in medicine. He remarks, that the persalts of iron are frequently employed solely on account of their astringent property, while the protosalts are occasionally considered as destitute of this quality. Yet this variation of itself is an indication of their distinctive use. The freshly-prepared carbonate is an excellent mild chalybeate, but difficult to keep in an unaltered state, so that preference is given to the ferrum redactum. The scale preparations of iron are held in repute, both from the extreme facility of their exhibition, and their grateful taste. When these three forms of iron are inadmissible, Dialysed Iron may be resorted to with admirable effect : it is a milder chalybeate than the preceding three, and does not produce the slightest irritation.

When other iron preparations are not tolerated Dialysed Iron is indicated. It would be wiser, in the opinion of Dr. Prosser James, where a chalybeate is needed, to commence with the most easily tolerated form, which does not interfere with the digestive organs, and need not be preceded by the time-honored aperient.

It remains, however, for consideration whether Dialysed Iron has more to recommend it than the ingenuity of its production, and the pleasantness of its taste. There have not been wanting, those who have pronounced decidedly against its efficacy. In the present instance, a most favorable opinion is expressed : " That the metal is readily taken into the blood is not to be doubted, although some have supposed that there would be a difficulty in the absorption of particles which do not pass the dialysing membrane. But this suggestion can have no weight, considering the numerous insoluble substances which are at once so changed in the stomach as to become easily assimilated." By the modern method of counting blood corpuscles, Dialysed Iron was found both to increase the number, and to have improved their condition. Dr. James gives, for an average dose, 20 to 50 drops daily, in three doses. Dr. Weir Mitchell gives a drachm of the solution at a time. Usually, the dose is from 10 to 20 drops after each meal in a little water, or on sugar.

Another and obvious use of Dialysed Iron is *as an antidote for arsenic*—preferable, certainly, in point of convenience, to the moist peroxide, which must be prepared at the time, involving the danger of delay.

It appears that specimens have made their way into the market, which are not only innocent of any acquaintance with the dialysing membrane, but seem little else than diluted solution of perchloride. The fraud is easily detected. The product of dialysis is neutral, and is non-astringent. Its purity can be ascertained by any of the tests mentioned above ; and, finally, it is a preparation which can only be prepared with advantage on a large scale. Abridged from the *London Chemist and Druggist*, Dec. 15, 1882.

CLIMATIC TREATMENT OF PHTHISIS.

In a communication to *The Record*, Dr. R. B. Haywood of Raleigh, N. C., states his doubts as to the propriety of sending consumptive patients to Florida and other debilitating climates. He expresses himself as being a convert to the views of those who, adopting a tonic plan of treatment, have with benefit turned the invalid current to the sea-shores of New Jersey. During his thirty-eight years of practice he has never sent a patient to Florida *with any satisfactory result*. On the contrary, he is convinced that the breaking down of the tubercle is hastened by such procedure. The climate of Florida, according to our correspondent, is exceedingly debilitating, miasmatic, and productive of complicating pneumonia. The country is subject to "northeasters," the temperature varies greatly from day to day, and insect life is particularly obtrusive and harassing. Experience, he claims, has taught him that the humidity, particularly where the air is free from impurities, exercises no baneful effect. Sea air is tonic, pure and medicinal. If there is any virtue in inhalations, he argues, the sea air breathed should also be of efficacy, in view of the various ingredients of the sea water, which it carries with it—compounds of chlorine, sulphuric acid, lime, magnesia, phosphoric acid, etc. The effect of sea air is quickly manifested in elevating the tone of the system, increasing strength, and exercising a marked action in anæmia and general debility. For the last three years Dr. Haywood has been in the habit of directing his patients to go to Morehead City or to the town of Beaufort, latitude 34° 41', situated in the "bight" of Cape Lookout, N. C., and thirty miles from the hundred fathom line of the Gulf Stream. The sea breeze, we are told, is constant, and delightfully tempered by the Gulf Stream. The mean annual temperature is identical with that of the city of Rome, in Italy, *i. e.*, 61°. Raleigh, almost on the same parallel, shows a mean of 57°, and Asheville, still farther west, one of 54°. Havanese invalids often suffer from the cold as late as March 10th, and "northers" frequently blow during half the winter.

Two of the writer's patients who had sojourned at Morehead last summer express themselves as feeling almost entirely well, while a third was greatly benefited. After discoursing upon the facilities of this place, Dr. Haywood concludes by recommending it not only to consumptives, but also to the anæmic, uterine cases and to persons suffering from general debility.

WRITER'S CRAMP.

M. Wolf (*Le Progrès Medical*, 1882, No. 3) has earned a considerable reputation by his success in the treatment of this class of affections. His system consists in a combination of gymnastics and massage. He makes his patients execute movements in all directions with the affected hand for a half an hour to an hour and a half at a time, three or four times a day; and, in addition, the muscles involved are stretched more or less forcibly three or four hundred times daily. He also uses massage and friction, and attaches considerable importance to percussing the affected muscles. The most essential part is the extension of the spasmodic muscles.—*Alienist and Neurologist.*

LOSS OF HAIR.

In case of general thinning and loss of hair when the exciting cause has been largely due to dandruff of the scalp:

℞. Tinct. of saponin..... ℥ iss.
Fluid petroleum..... ℥ j.
Hydrarg. oleate..... ℥ iss.

Sig. Shake well, after which pour a small quantity in the palm of the hand, rub between the hands and then apply with friction to the scalp.—*Medical Times.*

LEFT SIDE PAIN.

We frequently have patients come to us complaining of pain in the left side, who are otherwise apparently healthy, and we are at a loss to account or the pain. At a recent meeting of the Academy of Medicine, in Ireland, Dr. Wallace Beatty read a paper on this subject, which we read in the *Medical Press and Circular*, January 3, 1883. He considers the pain, in many instances, due to fecal accumulation, and it can be removed by getting rid of the accumulation. The pain is felt over the lower few ribs on the left side, associated with great pain on upward pressure of these ribs, but no pain on downward pressure. He ascribes the pain to the dragging of a loaded colon on the pleuro-colic ligament, setting up extreme irritability of the nerves.—*Phil. Med. Reporter.*

TREATMENT OF VULVAR PRURITUS.

M. Bernier (*Journal Med. et de Chir. Pratiques*) after trying all forms of application in a case, found that most benefit was obtained from the following unguent:

℞. Ung. diachylon simpl. (Fr. cod.), ol. olivæ, aa equal parts. M.

On the other hand, M. Delaporte recommends, in the same pruriginous affections, the following lotion:—℞. Sodæ carbolat., 3 ss.; aquæ colon., iiss.; glycerinæ, ℥ iiiss.; aquæ, ℥ x. M.

Lotions with this wash should be made whenever irritation is intense, and particularly at bedtime. The liquid should be applied cold, with a fine sponge.

AN ELECTRIC LAMP.

The *Boston Traveller* of January 2nd says:—Of all the attempts which have been made of late to utilize the wonderful resources of electricity for domestic purposes none have been more strikingly successful, and few are so interesting to a wide range of readers, as the new invention of the Portable Electric Light Company, whose manufactory, at 79 Water Street, is now a scene of the greatest activity, both day and night. The instrument from which this Company takes its name is a small and compact piece of mechanism, occupying a space only five inches square, and it can be readily carried from room to room as it weighs but five pounds. It is so constructed as to furnish electricity whenever desired for a large number of important and constantly recurring domestic uses. When provided with simple window, safe or door attachments, it serves as an unfailing and startling burglar alarm, the trespasser being confronted with light and bell instantly; and is equally adapted for the ordinary uses of a call bell. As a lighter, it is perfect, being capable of producing instantaneous light in any part of the house, by adjustments furnished by the company. It can also be attached to a medical galvanic coil by which a powerful current of electricity can be conveyed. Many prominent business men are interested in the Company, which was incorporated under the laws of Massachusetts, and is enjoying already a most gratifying success. Orders or inquiries should be addressed to the business office of the Company, No. 27 Water Street, Boston. We understand that this instrument is sold at the low price of five dollars: ten dollars complete with attachments.

BEEF TEA.

Dr. Ridges gives the following directions for preparing an article, which really is what it purports to be, and far superior to any of the so-called extracts of meat:

1. Take 1 pound of lean gravy beef, and cut it into pieces as small as possible. A sausage-machine will accomplish this most thoroughly, and thus save half the time of step No. 5, while it will enable you to extract all the goodness of the meat more thoroughly.

2. Place the meat in a preserve jar with one salt-spoonful of salt, and put the jar in a saucepan sufficiently large to allow the lid to be placed on when the jar is in it.

3. Mix in a large jug equal quantities (carefully measured) of boiling water and cold water.

4. Put a half a pint of this mixed water into the jar which contains the meat, and pour sufficient of the remainder into the saucepan outside the jar to reach as high as the water inside the jar, then put the lid on the saucepan, and place it on the hearth, not on the fire or on the hob. It will do no harm to cover the saucepan with a cloth or anything which will keep in the heat.

5. The meat must remain in the jar from three-quarters of an hour to two hours, according to the fineness to which it has been chopped, being stirred every quarter of an hour. If cut into pieces a little smaller than dice, one hour and a half will be sufficient. At the end of this time take out of the jar and strain through a hair sieve, or through muslin, with gentle pressure.

6. Place the red meat juice thus obtained in a small saucepan, and heat it to boiling while you stir. It will turn brown, and curdle. Strain off the solid flakes, and rub these thoroughly with a small teaspoonfnl of arrowroot or corn flour, then boil these again five minutes with the liquor which was strained off, and set it on oneside for the present.

7. Now take the meat which was left in the sieve at the end of step No. 5, and put it into a saucepan with a quart of boiling water, cover, and let it simmer over a slow fire for three hours; then allow it to boil and strain immediately.

8. Now boil this strained liquor down to half a pint

9. Then mix this half pint with the half pint left at the end of step No. 6, and you will have one pint of strong beef tea containing all the soluble portion of the meat.—*Druggist.*

THE USE OF IODINE AS A STOMACHIC SEDATIVE.

The employment of iodine for the relief of the vomiting of pregnancy has been somewhat in vogue for a number of years. And while the success attending its use has been pointed out with more or less enthusiasm its exact value has never been established.

Dr. T. T. Gaunt (*American Journal of the Medical Sciences* for April, 1883) has for a number of years been employing the compound tincture of iodine in drop doses in nearly all forms of emesis, and reports thirteen cases of the most varied character in all of which vomiting was promptly arrested by the use of this drug.—*American Journal of the Medical Sciences.*

ACTIVE LOCAL TREATMENT IN GLEET.

Dr. J. S. Main writes as follows to the *British Medical Journal:* G. B., aged nineteen, intelligent, of strumous temperament, came under my care over twelve months ago, suffering from gleet of five weeks' duration, following upon a sharp attack of gonorrhœa. The discharge was abundant and purulent; the patient himself in a weak condition, and suffering considerably from moral depression. Exploration with a bulbous-pointed catheter enabled me to detect that the raw surface lay just behind the fossa navicularis, and so I thought it a good case for local treatment. Accordingly, having kept the patient in bed, and prepared him by giving, a few hours previously, thirty minims of laudanum, I inserted a medicated urethral bougie, containing half a grain of nitrate of silver (the patient having previously emptied his bladder), the orifice of the urethra being kept closed by lateral pressure with the fingers. This "bit" rather severely, and was followed by the symptoms of acute urethritis. After these had passed off, however, I found that the treatment had been effectual, as no symptoms of gleet returned.

I have just lately seen this patient, and he informs me that the cure has been permanent. He mentions, however, that for some months afterwards, when he thought "his stomach was out of order," he felt a hot sensation at the part when making water, followed by a sensation of itching. The only other treatment in this case was a tonic of steel and quinine to relieve the depression.

I would remark that, in such cases, unless the patient can be kept in bed for a few days afterward, active local treatment can not be entertained. I have known a case in which acute epididymitis with orchitis (testitis of Bryant) followed the use of a strong injection of sulphate of zinc, the patient being allowed to go about as usual. Supporting the testicles with a suspensory bandage is not sufficient in such cases. In all cases, however, where active local treatment is employed, it is useful, and should not be omitted.—*N. Y. Med. Jour.*

IS CONSUMPTION A SPECIFIC AND CONTAGIOUS MALADY, OR IS IT NOT?

Dr. Formad, the pathologist of Philadelphia, in a paper read before the Philadelphia County Medical Society, claims to have proven the fallacy of Koch's theory as to the specific nature of tuberculosis; and he denies the existence of the tubercle bacillus, except as an accidental and secondary circumstance. Tuberculosis is, therefore, not contagious.

Prof. H. C. Wood, his co-laborer in the same field of study, holds the same opinions. Dr. H. D. Schmidt, of New Orleans, believes that he has made it certain that Koch's tubercle bacillus is only a fat crystal. A number of foreign experimenters are equally unable to find the tubercle bacillus; but very recently, Dr. Hirshfelder, of San Francisco, has found it again, and has shown,

as he thinks, that Dr. Schmidt had deceived himself, by washing out the coloring matter with ether, and thus rendering the bacillus invisible.

Prof. Wood also declares that the specific and contagious nature of tubercle is opposed to clinical experience, while Prof. Janeway reports a group of cases which tend to support the doctrine of Koch. A man, suffering from tuberculosis, communicated the disease to a pet dog who habitually slept with him, and the dog died. A second dog, which he substituted for the first, shared the same fate, and a third bid fair to succumb in like manner, but fortunately saved by the timely death of his master. It is not said that in the case of the dogs the existence of tuberculosis was verified by the medical attendant or by an autopsy, but no doubt Prof. Janeway is well assured of the correctness of the report as made by him.

Meanwhile, the disciples of the two schools are arranging themselves under their appropriate banners. In most cases the younger members of the profession, who never miss a chance for a seat in the car of progress, arrange themselves as disciples of the German school. They hold to the bacillus. While the older and more conservative members, as a rule, are to be classed among the doubters, if, indeed, they be not properly classed sometimes as open scoffers.—*We will see.—Med. Gazette.*

THE TREATMENT OF PRURITUS VULVÆ.

Professor N. F. Tolochinoff describes (*Vracheb. Vedom.*, No. 18, 1882.) the treatment he successfully adopts in endlessly varying cases of pruritus of the female external genitals. In all cases he recommends washing of the latter two or three times daily with a weak solution of bicarbonate of soda (half a tablespoonful in a basin of water with a tablespoonful of eau de cologne). When irritation, redness, and tumefaction are only moderate, powdering with oxide of zinc and starch (1 to 6), or smearing with zinc ointment (ʒ ij to ℥ j of spermaceti ointment) are sufficient. When irritation is more considerable, and erosions and exulcerations are present, he applies in addition 2 per cent. carbolic solution, or ½ per cent. (℞ Plumbi acetatis, ʒ j; tincture opii., ʒ iij; aquæ destill. lb.j). In cases of simple eczema there are indicated Hebra's diachylon ointment, green soap, and other similar remedies. Pubic lice are best killed by the gray mercurial ointment. When pruritus is very severe, but the changes on the external genital parts are only slight, the best results are obtained from ice-dressing, smearing with carbolized oil (1 to 1), hypodermic injections of morphine, and the internal use of bromide of sodium (ʒ j) daily. In cases of diabetic pruritus, the best means is the administration of alkaline mineral waters and salicylate of soda; the latter being useful, too, in pruritus accompanying chronic cystitis. In itching from gonorr hœal urethritis, the author cauterises the urethral walls with 10 per cent. of silver solution (by means of a silver or platine probe). In cases of pruritus from colpitis, the latter is treated by the introduction every third day, through a speculum, into the vagina of a teaspoonful of silver solution (1 to 30), with subsequent plugging; the tampons (and solution) being left for twenty-four hours. Their removal is followed by an injection of tepid weak solutions of lead or borax. Very useful, too, is the introduction of a powder consisting of crude alum and starch (1 to 5), the powder being retained in the vagina by cotton-wool tampons. In cases of cervicitis and endometritis, itching disappears on dilatation of the cervix and an intrauterine injection of tincture of iodine or solution of nitrate of silver. A good palliative means, in cases of pruritus from uterine and vaginal catarrh, is plugging of the vagina with hygroscopic cotton-wool (changed twice in a day), as first recommended by Dr. Gaillard Thomas.—*London Med. Record.*

TREATMENT OF PUERPERAL MASTITIS BY IODIDE OF LEAD OINTMENT.

In the *American Journal of Obstetrics*, Dr. Thomas T. Gaunt expresses his disappointment at the ill success of belladonna in checking the secretion of milk, but reports good effects from iodide of lead. He says: "The breast being dried and carefully cleansed, we smear its surface with the officinal ointment of the iodide of lead, and then gently rub it in until a considerable quantity is absorbed. Soak a piece of sheet-lint, of a size sufficient to cover the breast, in the following solution: Acetate of lead, from ʒ ij to ℥ ss to the pint, of one to four solution of alcohol. If we desire a more elegant preparation, eau de cologne may be substituted. If there be much pain it is often well apply an ice-bladder upon the sheet-lint covering the breast. The lint should be frequently dipped in the lead lotion. The following phenomena will present themselves: First, a cessation of pain, fullness and uneasy feeling of distention, which is so annoying. It is common for the patient, who has been exhausted by pain and consequent loss of sleep, to fall into a refreshing slumber even after the application is made. In the course of three or four hours the breast may be completely emptied by an experienced hand. The ointment should be used as a lubricant during the manipulation. By applying the iodide freely twice or thrice daily, the secretion will be gone in less than one week, as a rule. The pivotal point in the treatment is the use of this ointment, the evaporating lotion and cold being only adjuncts. I have proved by repeated trials that, when applied alone, it is capable of exerting an absolute control over the secretion. I believe we here invoke a specific action from the lead iodide. A point of considerable moment is the partial anæsthesia it is capable of inducing, which thus enables us to empty the glands, where before, even slight pressure was badly borne. Its action, without doubt, extends to the epithelial cells and inhibits their secretory activity, as is seen in its action, in cases like the above, in causing the drying up of the secretion."—*Boston Med. and Surg. Journal.*

THE CANADA MEDICAL RECORD,

A Monthly Journal of Medicine and Surgery.

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SUBSCRIPTION TWO DOLLARS PER ANNUM.

All communications and Exchanges must be addressed to the Editors, Drawer 356, Post Office, Montreal.

MONTREAL, APRIL, 1883.

MONTREAL GENERAL HOSPITAL.

The vacancy created by Dr. Wright's resignation from the Attending Staff of the Hospital, will be filled, it is believed, at the annual meeting of the Governors on the 17th of May. Dr. Shepherd and Dr. F. W. Campbell are the Candidates. With a view of being prepared for possible vacancy on the outdoor staff, which will occur in the event of Dr. Shepherd's election to the attending staff, there are several candidates in the field, viz., Drs. Burland, MacDonnell, and Blackader. As elections are now by ballot, no one can foretell even the probable result. There is the usual irritation felt at two of the candidates getting ahead of all others by an early intimation of the vacancy. It is just possible, however, that the coming election may shew that the Governors now understand this matter, and are prepared to judge of candidates upon other grounds, than priority in the field.

TORONTO GENERAL HOSPITAL.

There were 283 registered Students in attendance in the Toronto General Hospital during the past winter session.

MEETINGS OF CONVOCATION.

McGILL UNIVERSITY.

The annual meeting for conferring of degrees in the Faculty of Medicine was held in the William Molson Hall, on Saturday, 31st March, the room being crowded with students and friends of the University.

Professor Howard, Dean of the Faculty, read the following list in the Faculty of Medicine :

The total number of students enregistered in this Faculty during the past year was 188, of whom there were from Ontario, 93 ; Quebec, 44 ; Nova Scotia, 7 ; Manitoba, 3 ; New Brunswick, 15 ; Prince Edward Island, 9 ; Newfoundland, 2 ; West Indies, 2 ; United States, 13.

The following gentlemen, 30 in number, have fulfilled all the requirements to entitle them to the degree of M.D., C.M., from the University :

Allan, Clarence E.	Martel, Ovide.
Bowser, James C.	McLeod Arch., B.A. (McGill).
Cameron, Chas. E.	MacNeil, Alex.
Carruthers, George.	MacLean, John W.
Dearden, George A.	McDonald, Alexander.
Gardner, John J.	Muckey, F. S.
Gray, James.	Phippen, Samuel S. C.
Hanvey, Chas. B. H.	Ross, Wm. K.
Harrison Henry J.	Rutledge, And. J.
Henry, Wm. G.	Scott, Walter McE.
Hopkins, Alf. J.	Shaver, Wm. H.
Johnson, Jonathan R.	Sibler, George A.
Lathern J. Simpson.	Stewart, Andrew.
Loring, J. Brown.	Struthers, Robt. B.
Maher, J. J. E.	Wood, Edward S.

MEDALS, PRIZES AND HONORS.

The Holmes Gold Medal for the best examination and final branches was awarded to C. E. Cameron, of Montreal.

The Prize for the best Final Examination was awarded to J. Brown Loring, of Sherbrooke, Q.

The Prize for the best Primary Examination was awarded to Edwin G. Wood, Londesboro, O.

The Sutherland Gold Medal was awarded to R. F. Ruttan, B.A., Napanee, O.

The following gentlemen, arranged in the order of merit, deserve honorable mention :

In the Primary Examination Messrs. R. F. Ruttan, B.A., W. A. Ferguson, B.A., J. H. Darey, B.A., F. G. Finley, H. E. Trapnell, H. T. Hurdman, T. A. D. Baird, F. N. Burrows, M. C. McGannon, and Fred. M. Harkin.

In the Final Examination Messrs. Struthers, Lathern, Bowser, Gray, Carruthers, Gardner, Henry, Scott and J. R. Johnson.

PROFESSORS' PRIZES.

Botany.—Prize: Chas. W. Wilson, Cumberland, O., and J. A. Kinloch, Montreal.

For the best Collection of Plants.—H. E. Trapnell, Harbor Grace, Nfld.

Practical Anatomy.—Demonstrator's Prize : 2nd year, F. G. Finley, of Montreal ; 1st year, A. L. Howey, Eden, O.

Morbid Anatomy.—James Gray, of Brucefield, Ont., and C. E. Gooding of Barbadoes, W. I.

Dr. J. Brown Loring then delivered a very suitable valedictory on the part of the class, and Prof. Girdwood addressed the graduates on behalf of the Faculty.

BISHOP'S COLLEGE.

Twelfth Annual Convocation of the Medical Faculty.

A large number of friends of the College gathered in Synod Hall on the afternoon of the 5th of April, and among them a goodly representation of the fair sex in spite of the very disagreeable weather. The chair was occupied by Dr. Heneker, of Lennoxville, Chancellor of the University of Bishop's College, and on the platform were Dr. F. W. Campbell, Dean of the Faculty of Medicine, and Dr. Kennedy, Registrar, while the members of convocation in their robes occupied seats on the floor on either side.

Dr. Heneker, in the course of his introductory remarks, alluded to the growth and importance of Bishop's College, of the good and substantial work being done by the Medical Faculty here, as well as by the parent institution at Lennoxville. He discussed at some length the propriety of making the degree of B.A. a qualification for entrance into any of the learned professions, as it is the world over except in this province. The College School at Lennoxville was also doing good work, and much might be expected from it in the future, from the fact of the influence of the professors of the College over it, among whom the name of Rev. Principal Lobley was mentioned and a high tribute paid to his learning and merits.

Dr. F. W. Campbell, Dean of the Faculty, then read the

annual report,

in which he stated that the session just closed had been very trying, but that in spite of difficulties the work had been well and successfully accomplished. At the opening of the year they had been called upon to mourn the loss of the late Dean, Dr. David, and shortly after the opening of the session, the late Dr. Kollmyer had been taken down, and, after a prolonged and painful illness, passed to his long home on the 13th of March. He had been connected with the Faculty from its very foundation, and was, without doubt, one of the ablest lecturers on Materia Medica in the Dominion. This course of lectures had been delivered during the winter by one of the graduates of the College, Dr. Young. Dr. Kennedy, Professor of Midwifery, had also been prevented by serious illness from performing his duties, and the work had been done by Dr. McConnell, Professor of Botany. The Dean then read the pass and prize lists as follows :—

Botany—A. F. Longeway, prize; R. C. Blackmer and A. P. Scott, honorable mention; H. P. Wilkins, D. McNamara, J. P. Charest, P. E. Minckler, M. Tremblay, B. J. Ambrosse.

Practical Chemistry—C. E. Parent, F. R. England, E. Bronstorph, C. B. Ball, W. D. Nutter, C. Lafontaine, D. McNamara, W. G. Nichol, A. P. Scott, C. Ulrich, E. Laferriere, W. Patterson, J. P. Charest, E. M. Pinckney.

Anatomy—F. R. England, C. Lafontaine, W. H. Drummond.

Physiology—C. Lafontaine, C. E. Parent, W. G. Nichol, E. O'B. Freleigh, E. Laferriere, W. D. Nutter.

Materia Medica—J. B. Saunders, A. P Scott, W. E. Nichol, E. M. Pinckney, C. Lafontaine, D. McNamara, W. D. Nutter, C. E. Parent, E. Laferriere, C. Ulrich, J. P. Charest.

Chemistry—A. P. Scott, W. G. Nichol, E. M. Pinckney, D. McNamara, C. E. Parent, C. Ulrich, W. D. Nutter, C. Lafontaine, E. Laferriere.

Hygiene—J. A. Casswell, E. Sirois, F. R. England, W. G. Nichol, C. E. Parent, E. M. Pinckney.

The following candidates successfully completed and passed their primary examinations, consisting of Anatomy, Physiology, Materia Medica and Hygiene :—Ernest E. Bronstorph, winner of the David Scholarship; R. C. Blackmer and C. B. Ball, first-class honors; E. O'B. Freligh, second class honors; P. E. Minckler, W. Patterson

Passed in Medical Jurisprudence, F. B. Saunders, W. A. Mackay.

Passed the final examinations, consisting of Practice of Medicine, Surgery, Obstetrics, Pathology, Medical Jurisprudence, Clinical Medicine and Clinical Surgery—J. A. Casswell, Wood gold medal; E. Sirois, Chancellor's prize; P. E. Minckler.

Dr. Campbell having resumed his seat, the oath of allegiance to Her Majesty was administered to the graduating class by the Chancellor, and the whole assembly united in singing "God Save the Queen."

Dr. Kennedy then administered the medical oath, after which the

DEGREE OF C.M., M.D.,

or Master of Surgery and Doctor of Medicine, was conferred on Dr. W. R. Bell, of New Edinburgh, Ont., *ad eundem gradum*, that gentleman being a graduate of Erlangen, in Bavaria, the birthplace of the celebrated Pereira. The degree in course was then conferred on the graduating class, viz., Drs. J. A. Casswell, E. Sirois and P. E. Minckler.

The gold medal was then presented to Dr. J. A. Casswell, the Chancellor's prize to Dr. E. Sirois, senior prize for practical anatomy to Ernest Bronstorph, and the junior prize to H. P. Wilkins.

The Dean, Dr. F. W. Campbell, then delivered the valedictory address to the graduating class. He spoke feelingly of the duties and responsibilities before them in the noble art which they had adopted; gave wise counsel for their behaviour in professional life, urging them to be guided by the example and follow in the footsteps of the many noble men who had sacrificed their lives in battling with epidemics of disease. Their profession could claim to be the oldest of all professions, dating from 500 B.C., when Hippocrates, that mighty intellect, first laid the foundation of it; though not yet an exact science, the great progress made during the present century pointed hopefully to a time when many diseases now pronounced incurable would be amenable to the skill of the physician. Their life would be one of danger and diffiulty, but they must not shrink; nor, on the other hand, must they look for success too rapidly; the surest success was that which came slowly, and earnest, faithful work with enduring patience would more surely bring good results and well merited approval than any clap-trap devices for getting into practice. He concluded by wishing them God-speed, after which the meeting adjourned.

COLLEGE OF PHYSICIANS AND SURGEONS, P.Q.

The Preliminary Examination for admission to the study of Medicine will be held in Montreal on the 4th and 5th of May. There are about eighty candidates.

The Semi-annual meeting of the Board of Governors of the College will be held in Montreal on the 9th of May.

The College has obtained judgment, and a fine of $50 and costs, against Ferdinand Rousseau, of Arthabaskaville, for illegal practice of Medicine.

In referring to the recent movement in England, having for its object the collective investigation of disease, Sir James Paget said: "If I may impute a fault to those [physicians] who are admirable in all the ordinary work of life, I would suggest how large a quantity of knowledge lies scattered and lost to the scientific world in charge of those who are in large practice and who record nothing."

The National Health Society, London, has introduced a form of garment, made of mackintosh, to be worn by those people who are compelled to enter the apartments of persons suffering from contagious diseases. Used in conjunction with a medicated cotton respirator, it is said to be a protection against contagion.

Dr. Reklam, in a recent number of the *Gesundheit*, says that the headache, restlessness, etc., which are sometimes caused by keeping flowers in bed-rooms, do not result from any special properties of the flowers themselves, but from the continued strain brought to bear upon the olfactory nerves.

PHARMACEUTICAL ASSOCIATION PROVINCE OF QUEBEC.

The examination for certificates was held on the 25th April, when the following gentlemen were successful:

Major Examination.—Chas. E. Scarff, Alph. Davidson, Ed. Leonard, Alexis Robert, Ernest G. Swift, Adhelm Dugal. *Minor Examination.*—A. E. Holden, L. Flanagan, Joseph H. Nault, R. A. Kerry, A. R. Reid, F. Baker, J. L. Beaudry, W. Purchard, M. B. Rice, E. F. G. Daniel. In the minor list the first two tied.

The Board of Examines, is constituted as follows:—A Manson, Esq., Chairman; Mssrs. H. R. Gray, J. D. L. Ambrose, H. F. Jackson, R. McLoad (Quebec), F. E. Gauvreau (Quebec), and William Anern, Secretarp and Registrar.

Mr. Ambrosse having accepted position of Drug appraiser at the Custom House will retise from the Council, but will retain his position on the Board of Examiners.

DR. W. E. SCOTT.

We are sure the numerous friends of Dr. W. E. Scott, Professor of Anatomy in McGill University and Surgeon of the Grand Trunk Railroad, will learn with deep regret of his serious illness. He suffered much during the winter from asthmatic attacks, but his hale and hearty appearance gave hope that their presence did not indicate serious organic disease. Within the last few weeks, however, evidence of renal and cardiac trouble became too evident to be thrust aside. He has been confined to the house for some weeks, and at the time of writing there are some signs of amelioration. We know that all his friends will join us in hoping that his vigorous constitution may be able, for a while at least, to hold in check his serious disease.

THE NEW ANATOMICAL ACT.

Public opinion has been fairly aroused on this subject, and the result has been that a new Anatomical Act has been passed by the Quebec Parliament. This Act, so far as we can gather, seems well calculated to do away with body snatching. It must, however, be enforced, or the result sought for will not be obtained. To have it enforced we must have in Montreal a thoroughly competent inspector, and this, we believe, we are likely to have. Mr. Lamirande, for the past three years the prosecuting officer of the College of Physicians and Surgeons, is a candidate for the office, and we hope will receive it. In our opinion he is peculiarly well qualified for such a position, and we are glad to know that his prospects are good. During the discussion in the House we regret to say that several members seemed woefully ignorant on the subject, and expressed themselves in a manner quite uncalled for. It was also opposed where we would have thought support was certain. Thanks, however to the Ministry, it was passed, and we hope in our next to give its text in full.

The Committee of the American Medical Association appointed to consider the advisability of issuing an Association journal, and to take steps to accomplish that object, has received such encouragement from the members of the Association that they feel warranted in beginning its publication. It is to be a weekly, and it has been determined to publish it in Chicago. Dr. N. S. Davis, of that place, has been selected as the editor.

WINNIPEG MEDICO-CHIRURGICAL SOCIETY.

The Medical men in Winnipeg have formed a Medico-Chirurgical Society, and elected the following officers :

President—Dr. Lynch.

1st Vice-President—Dr. Whitefield.

2nd Vice-President—Dr. Codd.

Secretary-Treasurer—Dr. Covernton.

Council—Drs. O'Donnell, Patterson, Jackes, Brett, Phillips and Kerr.

THE CENTURY MAGAZINE.

This magazine still maintains its hold on the public as one of the very best of our monthlies. Subscriptions can commence at any time. We give the *Century* and the RECORD for $5.00 a year.

COPPER AMMONIA-SULPHATE IN NEURALGIA.

Dr. Féréol some time ago recommended ammonia-sulphate of copper in trigeminal neuralgia. Dr. Vaudenabeele (*Bulletin-Générale de Thérapeutique*, October 25th, 1882) has recently found this drug of marked benefit in certain cases of facial *tic douloureux*. In almost all it relieved the pain, sometimes immediately, and restored sleep to patients deprived of it for weeks. The dose was from one and a half grains to two and a quarter, increased,according to the sensibility of the patient, to three and five grains. The digestion was somewhat disturbed.

GALL STONES IN AN INFANT.

Dr. A. Dunbar Walker contributes the following interesting case to the *British Medical Journal*. He saw a male child, three months old, who had been brought up entirely at the breast, and had always been healthy, excepting a slight attack of jaundice, a few days after birth. In the evening it commenced to cry, and continued to do so almost uninterruptedly for six hours, when a sedative mixture afforded a little restless sleep. The next morning a dose of caster oil was given, which soon caused an evacuation. The passage was healthy in appearance, but upon close inspection, three small ovoid bodies, dark green in color, and as hard as wax, were found. The larger one weighed two grains, the other two were much smaller. These substances seemed to consist of

cholesterine; minute particles of the coloring matter of the bile could be detected here and there. This occurrence might account for the crying in many cases, and it would suggest the advisability of looking for these gall stones in the case of fretful children.

NITRATE OF LEAD IN CANCER OF THE CERVIX UTERI.

M. Cheron, in the *Revue des Maladies es Femmes*, says that he has had very good results from the direct application of the nitrate, powdered, to the ulcerated cervix. After touching the ulcerated surface with glycerine, he injects about a quart of cold water, containing about a drachm and a half of tr. ferri perchlorid., and then dries the surface with absorbent cotton. Finally, the following powder is introduced, by means of a syringe made for injecting powders:—

℞. Plumbi nitrat., pulv., ℥ ss.
Lycopod., pulv., ℥ j. M.

The powder is retained in place by a tampon of cotton. Through this means suppuration diminishes considerably, as also the bad odor. Even hemorrhage is not so profuse, and in some cases it is entirely suppressed.

NEW REMEDY FOR SYPHILIS.

The *Medical Times and Gazette*, January 6, 1883, says that Prof. Liebreich brought forward, at the last meeting but one of the Berlin Medical Society, a new drug for the treatment of syphilis by the subcutaneous method. This drug rejoices in the name of hydrargyrum formidatum, and is, therefore, merely a different form of the old cure for syphilis. The mode of its preparation was not stated: chemically, it belongs to the amide group, in whose structure the monovalent amidogen (NH_2) plays an important part. Liebreich was led to think of this new preparation from the notion that the ordinary amides of the body, of which urea may be regarded as the principal one, pass out of the organism in an undecomposed state; when, however, an amide is in combination with a metal, decomposition readily occurs, and the metal is reduced and deposited. Liebreich repeated his experiments before the Society, and showed that these conjectures were quite true for the metal mercury. It is supposed, therefore, that the formamide of mercury, after the hypodermic injection, undergoes disintegration; and so the mercury is set free, and is able to exert its well-known power over the lesions of syphilis. The preparation is easily soluble in water, is of neutral reaction, does not coagulate albumen, is not precipitated by caustic soda, and the presence of mercury can be demonstrated by means of sulphide of potassium. The drug, when injected under the skin, produces its effects very surely and rapidly. This is not regarded as a disadvantage, for the medicine is said to be easily borne, and has never produced salivation in Liebreich's hands. There is very little pain attendant on the injection, which has never excited any inflammation. From a half to a whole of a Pravaz syringeful (a one per cent. watery solution) may be injected twice or thrice daily. Liebreich looks on the preparation as the best we yet have for subcutaneous injection.

THE LIVERMORE STYLOGRAPHIC PEN.

A fountain pen that always writes and never "leaks," that makes a fair, plain line and never blackens the fingers, and that, once filled, can be used for days without change, avoiding all the bother and interruption of reaching over to the inkstand for a fresh dip every two minutes, that can be carried in the pocket, and is as handy for use, and as neat as a lead pencil, and that writes on any paper, however thin or soft: such a pen is worth having. And such a pen is the "Livermore Stylographic Pen." This we know from personal use, and from having seen many of them in use among Medical Students in Montreal. They may be ordered by mail by addressing Stylographic Pen Co., 290 Washington Street, Boston, Mass.

PERSONAL.

Dr. Henry Harkin of Montreal is on a visit to England.

Dr. Canniff has been named Health Officer for Toronto. It is a good appointment.

Dr. William Wright, after a tenure of office of about thirty years as Attending Physician to the Montreal General Hospital, has resigned. He has also tendered his resignation as Professor of Materia Medica and Therapeutics in the Medical Faculty of McGill College.

Dr. E. S. Wood (M.D., McGill 1883) has been appointed a Surgeon on one of the Western Sections of the Canadian Pacific Railroad.

Dr. Field, of Barbadoes, who has been spending some time among his friends in Montreal, has left for home.

Dr. C. E. Cameron (M.D., McGill, 1883) has sailed for Europe, where he intends remaining two years.

Dr. W. R. Sutherland (M.D., McGill, 1878) has been appointed an Assistant Demonstrator of Anatomy in McGill College. He has sailed for Europe, and intends spending six months between Paris and Berlin.

Dr. William Gardner, Professor of Hygiene and Medical Jurisprudence and Lecturer on Gynecology in McGill Medical Faculty, has given up general practice, and intends devoting himself entirely to Diseases of Women.

Dr. Sirois (C.M., M.D., Bishops, 1883) has commenced practice in Three Rivers, Mass., U.S.

Dr. Casswell (C.M., M.D., Bishops, 1883) has left for the North West, where he intends to locate.

Dr. MacCallum has resigned the Chair of Midwifery and Diseases of Women and Children in McGill College. The chair has been divided, and Dr. Arthur A. Browne (M.D. McGill, 1872) has been appointed Professor of Midwifery, and Dr. William Gardner (M.D. McGill, 1867) has been appointed Professor of Gynæcology.

Dr. Stewart of Brucefield, Ont., (M.D. McGill, 1872) has been appointed Professor of Materia Medica in McGill Faculty of Medicine *vice* Dr. Wright resigned. Dr. Stewart has for some time been in Vienna. This appointment has rather surprised Montreal Medical men, but it is believed that for some time the Faculty have looked upon Dr. Stewart as Dr. Wright's successor.

Dr. C. A. Wood, (M.D. Bishop's, 1876) has resigned the Chair of Chemistry in Bishop's Medical Faculty. It is believed Dr. Wood will be elected to another Chair in the Faculty.

Dr. William Young (M.D. Bishop's, 1877) has been elected Professor of Chemistry in Bishop's Medical Faculty, *vice* Dr. Wood resigned.

Dr. W. D. Ross, of Pembina, U. S., who graduated at McGill in 1875, and who is a son of Judge Ross of Ottawa, died last month from diphtheria. He had been settled at Pembina for some time, and was much beloved.

REVIEWS.

A Practical Laboratory Course in Practical Chemistry. By JOHN C. DRAPER, M.D., LL.D. Wm. Wood & Co., New York.

The object of this little work is to give the medical student a course in chemical manipulation and in the use of symbols and equations sufficient for his requirements as a practising physician.

After a few pages devoted to general manipulation and definitions, wherein under Valence the element nitrogen is given as N‴ the course proper commences. This is divided into four sections. Section 1, on Poison, includes, amongst the inorganic, As, Sb, Hg, Pb, Cu, P, the mineral acids, oxalic and hydrocyanic acids, and the alkalies. The student is here informed that Marsh's test consists in the conversion of arsenic into arsenite of hydrogen, while for the description of the test he is referred to larger works; with this exception the reagents in use for the detection of the above poisons are given in full, and the following errata only require correction: —

The formulæ for copper carbonate $Cu\,CO_3$, and lead carbonate $Pb\,CO_3$; the action of ammonia upon calomel and upon corrosive sublimate; the statement that liquor potas. arsenitis contains per oz. 4 grs. of arsenic; and a printer's error which makes ferrocyanide of potassium the precipitate obtained from copper salts by ferrocyanide of potassium. The organic poisons noticed are strychnia and morphia with the preparations of opium; the easy detection of meconic acid in the latter is here omitted.

Section 2 gives simple tests for the detection of impurities in water, with estimation of hardness by means of Clark's soap test.

Under sections 3 and 4 prominence is given to the examination of urine, normal and abnormal, and to urinary sediments and calculi. The examination of the animal fluids, being of special importance to the practising physician, the space taken up by these two sections very properly comprises nearly half the work; methods for the quantitative estimation of phosphates, chlorides and sugar in urine are given—the only noticable omission being that of urea by the nitroso-nitric and hypobromite processes.

Conveniently every other page is left blank, in order that the student may make notes of his experiments and of facts obtained from oral instruction.

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MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

Stated Meeting, March 16th, 1883.

T. G. RODDICK, M.D., VICE-PRESIDENT, IN THE CHAIR.

Dr. Osler exhibited the following pathological specimens :—

Membranous cast of Windpipe and Bronchi.—An unusally extensive cast of the air passages taken from a patient of Dr. Blackader's who died of diphtheria. Tracheotomy had been performed, but death took place from the gradual filling of the bronchi with the exudation. The glottis was completely occluded, and the membrane was so firm and consistent that it was removed entire from the rima to the tubes of the 3rd dimension, the tracheotomy orifice perforating it about 1½ inches below the rima.

Chronic Bright's Disease.—The patient had been ill for six weeks with dropsy and other signs of chronic renal trouble. The fluid in the peritoneum and pleural sacs was milky, and a specimen of it was shown by Dr. Ross at a former meeting. The kidneys were large, pale and smooth; cortices swollen, and presented many opaque areas of fatty degeneration. Examination showed the interstitial tissue to be also somewhat increased, and many of the Malpighian bodies were atrophied.

Aneurism of Pulmonary Artery in small cavity.—Taken from patient with chronic phthisis, who had had profuse hæmoptypsis, which had been checked, but death followed in 48 hours from exhaustion. In the upper part of the right lower lobe there was a small cavity filled with clots, and projecting from the wall was an aneurism the size of a large pea. This had ruptured, and was filled with pretty firm clots.

Dr. Osler called attention to the frequency of these small aneurisms, and to the fact that the fatal hæmoptysis in chronic phthisis is very often due to their rupture.

Acute Tuberculosis of Lung and Spleen.—A. M., aged 26, under care of Dr. Geo. Ross, admitted into hospital with symptoms suggestive of some low form of blood poisoning, with severe pain and tenderness in right side of abdomen. No physical signs of lung or heart trouble. A year before, had symptoms of chest trouble, apparently recovered from, with exception of loss of weight and night sweats. While in hospital he failed rapidly, with irregular temperatures. One week before death, physical signs began to develop over front of left chest, slight dullness, feeble breathing, and fine râles; this condition soon extended over the whole of both lungs, increasing rapidly in intensity. At autopsy, lungs crepitant, except at apices, where they are firm; both organs universally stuffed with miliary tubercles, largest in upper lobes, making small caseous nodules size of

split peas. This condition most marked at apices, in which are seen small old cavities. Spleen there times normal size, presenting numerous miliary tubercles in its substance. Kidneys average size; through cortices are several small scattered tubercles. Under the microscope, in spots, a good deal of proliferation of epithelium is seen in the tubes and around the Malpighian capsules. Liver normal. Brain not examined. Careful examination showed no sign of disease in right side of abdomen.

Lead Poisoning.—Dr. Girdwood read the reports of two cases occurring in the practice of Dr. Groves, Carp, Ont. The first was that of a widow, aged 34, who sent for the doctor November 30th, 1880. She was suffering from pain in abdomen; no tenderness on pressure. Appetite bad, much thirst, fœtor of breath, tongue coated, constipation. Treated her for colic. Was seen again in three days. Pain worse. Now found blue line on gums. Diagnosed lead poisoning. After much trouble, the source was traced to the well, or rather the pump. Six months before, a large piece of lead had been placed on the valve to weight it down, and the water, being very pure, acted upon the lead and made a solution. Other members of the family had been slightly affected by it. All recovered completely after the cause was removed. The second case was a Mrs. C., aged 37, who sent for Dr. Groves Oct. 19th, 1882. She complained of abdominal pains, also pains in the back and limb; had been so affected for two weeks before sending for the doctor. Her tongue was heavily coated with a dark fur; blue line on gums; inside of cheeks bluish-black; countenance anxious; face pale, subicteroid. Abdomen slightly tympanitic; no pain on pressure. Pain in abdomen was paroxysmal and lancinating in character, and seemed to shoot into the back and down lower limbs. Complained of metallic taste, fœtor of breath, and annoying eructations. No appetite; bowels constipated. Urine scanty and dark-colored. Extensors of forearms paralyzed. Wrist-drop more marked on right side. Was much emaciated; raising head off pillow caused nausea. Pulse 120; temperature 102°. Treatment: Gave first a brisk purgative, and left mixture of Potass. Iodid. v grs. three times a day and Chlor. Anodyne to relieve pain. After examining the well, cooking utensils, etc., at last came across a jar of vinegar, which was examined, and found to contain a large percentage of lead acetate. On breaking the jar, a rounded elevation was seen on the inside of its bottom. This prominence was eaten into by the vinegar. The jar and vinegar had been purchased on October 4, '82. After questioning, he found his patient had partaken largely of this vinegar. In connection with these cases, Dr. Girdwood said: Dr. Groves sent me, in December last, a sample of vinegar which he wished me to analyse for lead, stating that he had a case of lead poisoning. I examined the sample of vinegar, and found it to contain 2.01 per cent. of acetate of lead. He also sent me a piece of broken pottery, which he informed me was a portion of the bottom of the stone jar which had contained the vinegar. I found this jar had been glazed with litharge, or oxide of lead, and that it had been acted upon by the acetic acid and the whole surface eroded. In these two cases of lead poisoning there is considerable interest in the sources whence the lead was taken into the system, and these point to the necessity of being constantly alive and searching all possible and impossible causes or avenues by which poison may be introduced into the system. In the first case, the danger of storage of water, more especially water which is pure, in leaden cisterns or carried through leaden pipes is brought prominently out. Had the water contained any sulphate, an insoluble sulphate of lead would have been found, which would have been inert. In the second case, the necessity of greater care in guarding food of all kinds from contamination is shown. Had this sample of vinegar been adulterated, as it frequently is, by 3 per cent. of sulphuric acid, this case of poisoning would not have come to light, because the sulphuric acid would have formed an insoluble sulphate, which would have stayed further action. But from not having any sulphuric acid in it, the acetic acid gradually acted on the oxide of lead and dissolved it. Another point of interest is the fact of increased temperature and increase of pulse, symptoms which I fail to find recorded in authors who speak of the symptoms of poisoning by lead. They also exhibit the cumulative effect of the poison, the gradual introduction of the poison, at last producing the set of symptoms which lead to the diagnosis of lead as the poison. And the poison acting on the liver, preventing the secretion of bile, and all the train of symptoms indicating hypochondria, depression of spirits, fear of impending danger, being well marked, especially in the latter case. And the gradual diminution of the

symptoms after the cessation of the cause. These cases also determine, as far as they go, that the amount of lead sufficient to produce these symptoms is eliminated from the system in the course of two or three weeks. It is a pity that the urine in these cases was not examined, so as to ascertain the exact period at which it ceased to appear, and so have given a little more definite criterion of the time it takes to eliminate lead from the system. I scarcely see what steps can be taken legally to prevent a recurrence of these accidents; but it will be well to diffuse the knowledge that lead used for water storage, especially in a country where good soft water is common, is liable to be dangerous. And that it is customary to use lead in the glaze of common earthenware, and that such a practice is fraught with danger to the public.

DR. KENNEDY, PRESIDENT, IN THE CHAIR.

April 13th, 1883.

Dr. Trenholme exhibited the ovaries or fallopian tubes removed from a patient three weeks ago.

This is the first time Tait's operation has been made in Canada.

The right ovary was cystic, and weighed about 1 lb.; the other ovary and both tubes were normal.

The patient, aged 33, had been a sufferer for the last 14 years from pelvic derangement, and general prostration of health had followed, so that of late years she was incapacitated for any usefulness in life.

The uterus was retroverted and could not be maintained in its natural position. It is too soon to express an opinion as to the results of the operation, but so far every thing looks favorable for a perfect cure. The menses have not appeared though four weeks have passed.

The abdominal incision was completely united by 3rd day, and all the sutures removed on the 6th day. She was sitting up on 10th day, down stairs to her dinner at end of the 3rd week.

Dr. Osler showed the following specimens :—

Aneurism of aorta, rupture into pericardium.—The specimen was taken from a gentleman about 70 years old who had never, so far as is known, suffered from any symptoms of heart disease, and had not consulted a medical man. Death took place suddenly while at stool. The sac, as large as the closed fist, was connected with the arch, and projected above and anteriorly, eroding the first piece of the sternum. It was lined with thick laminæ of fibrin. Below it was attached to the pericardium, and a small rent had occurred 4 by 2 mm., through which the blood had escaped into the pericardium. The valves of the heart were a little atheromatous and the muscles very fatty.

Double Hernia.—From a man aged 80, an inmate of the House of Refuge, who had died of cerebral softening. There was double inguinal hernia, both the sacs very large. The left one contained the whole of a very long and lax sigmoid flexure, which was full of hard scybalous masses; the right sac contained the cæcum and appendix, the first three or four inches of the colon and the last twelve inches of the ilium.

Puerperal convulsions, ventricular hæmorrhage.—Dr. Osler showed the specimen taken from a primipara in 9th month, æt. 40, who was admitted to the Lying-in Hospital on 23rd of March. Seemed pretty well, but at times acted strangely; had been intemperate, never complained of swelled feet. Thursday, April 5th, she seemed as well as usual, and ate heavy meals. A little after 11 p.m. she vomited, but after 2 a.m. laughed and talked with the other patients. At 3.30 a.m. she was found sitting up in bed with the chamber-pot between her knees. Soon after she had a convulsive seizure, became profoundly comatose, and died at about 5 a.m. The urine was drawn off and found loaded with albumen, and contained numerous casts. At the autopsy the condition of the brain as here seen was found. An extensive hæmorrhage had taken place into the ventricles, and the clots form perfect casts of the lateral, 3rd and 4th; tha tin the left lateral is the largest, and the blood has come from the corpus striatum of this side, the intraventricular portion of which is swollen and infiltrated with clot. In the uterus there was a mature fœtus. The kidneys were enlarged, congested, and the tubules of cortex swollen; epithelium cloudy and granular.

Fibroid Heart and Atrophic Kidneys.—The specimens were taken from a man aged about 80, who died of softening of the brain (thrombotic) in the House of Refuge under Dr. Burland's care. The left ventricle presents, as seen in the specimen, a large area of fibroid degeneration occupying the usual position at the apex and lower part of the septum. The valves were all thickened, but the atheromatous changes in the aorta were slight. The kidneys show advanced senile atrophy, cortices much reduced, pelvic fat greatly increased, arteries very prominent.

Dr. Roddick read a short paper entitled "Notes on Hare Lip." He first spoke of the etiology of this deformity, believing that it was sometimes hereditary, and due also in many cases to maternal impressions. Instances were cited in proof of both theories. The important question regarding the age at which the operation should be performed was then discussed. It was thought that some time between the fourth week and third month should be chosen, the exact time depending on certain circumstances connected with each case. The reader of the paper always gives an anæsthetic, and prefers ether to chloroform. He uses a narrow tenotomy knife with which to make the parings, and always saves the latter until the operation is completed. As to sutures, he prefers the hare lip pin properly armed with leaden discs, the other sutures being of catgut. Reference was then made to the treatment of the jaw in cases of clef palate complicating hare lip. It was recommended to break down the projecting portion, and to wire the two parts of the jaw together. Where the intermaxillary body was prominent it should be broken back, wedged in, and wired between the lateral portions, the incisor teeth being thus retained. With regard to the after treatment, the child should be allowed to suckle only when the nipples of the mother are small, and readily grasped by the child. In the application of plaster and other dressings care should be taken not to have them too wide as they cross the lip lest they disturb the wound.

Dr. Fenwick asked Dr. Roddick, how to get over fact that you have rudimentary teeth in intermaxillary bone? Rarely met with a case without these rudimentary teeth.

Dr. Blackader reported a case in point through alveolar border—operated on by Dr. Roddick with excellent results. Suggested the feeding of these cases with cream and lime water.

Dr. Hingston agreed in general with paper, but there were some features to which he did not assent. First as to life, he thought the selection of the 2nd or 3rd month of infantile life somewhat arbitrary, and preferred to operate immediately after birth. His success was almost in direct ratio to the early period at which the operation was performed. If a few months elapsed before seeing the child he preferred waiting till after teething. He was not in favor of the hare lip pin, and had discarded it nearly twenty years ago. He had found that at the point of entrance and of exit marks were left, and if the pin were left four or five days, as recommended by the reader of the paper, the marks would necessarily be unseemly. He preferred wire sutures, but relieved tension on them by the plasters on the cheek of a deltoid form, broad behind and drawn towards each other by wire. Wire had an advantage over thread; as the plaster yielded, a twist or two made all tight again, whereas loosening a knot and retying disturbed the parts, and sometimes occasioned separation. He thought no general rule could be laid down as to treatment of the inter-maxillary bone. Generally it could be utilized, and in this he agreed with Dr. Roddick, rather than with Dr. Fenwick, and the danger of having the teeth which might be growing in it turning back, as alluded to by one speaker, who was chimerical, as the bone was merely brought back to its normal position. Where the hard palate was separated, treatment necessarily varied. Where the fissure was wide Langenbeck's uranoplastic operation had to be deferred; but where the fissure was narrow and of uniform width throughout, the operation could safely be performed immediately after birth, paring the edges of the fissure, pressing the maxillary bones together, and retaining than *in situ*. Of the latter operation, however, he had not sufficient experience to warrant him in giving it preference over the later uranoplastic.

Dr. Henry Howard spoke of a case operated upon at birth where there was double hare lip with cleft palate with good results.

Dr. Shepherd asked for statistics as to heredity.

Dr. Hingston denied heredity, but accepted nervous influence.

Dr. Roddick made a few remarks in reply to members who had spoken on the paper. As to the question of heredity, the last case on which he had operated bore out the law, the grandfather of the child having suffered from hare lip. Notwithstanding the strong ground taken by Dr. Hingston in favor of operation immediately after birth, he still thought that in the vast majority of cases it should be deferred for at least three or four weeks.

Dr. Trenholme related a case of utero-tubal gestation, where the use of the sharp curette was followed by the escape of a dead embryo *into*, and then from, the uterine cavity. This was the second case of irregular gestation he had met with this winter. It was of special interest as shewing what can be done in those cases where the fœtus is partly within the cavity of the uterus. The patient made a good recovery.

Dr. Shepherd mentioned having lately seen a boy 8 years of age suffering from chancroid and gonorrhœa.

The Secretary, Dr. Henderson, handed in his resignation which was accepted. A resolution was passed by the Society to present Dr. Henderson with an illuminated address, expressing appreciation of past services and good wishes for future success in his new sphere of labor.

Dr. Gurd was appointed Secretary and Dr. J. Leslie Foley, Librarian.

Progress of Medical Science.

ON THE TREATMENT OF CROUP.

By Professor Dujardin Beaumetz, Member of the Academy of Medicine; Physician to the Hospital St Antoine, etc., Paris, France.

To guide you in the diagnosis of pseudo-membranous croup, and of the grave forms of simple laryngitis, you will have only two important symptoms to take into account—of course, you should first settle the question, if possible by inspection whether there be false membranes in the throat or windpipe: 1. In simple laryngitis, paroxysms of suffocation are not so common or so noticeable as in croup, the difficulty of breathing is constant, but exacerbations are not so marked. 2. The march of croup is more sly, insidious, and progressive, the symptoms of the *Debut* are not generally alarming. The onset of simple laryngitis is more acute, noisy and violent, but in the milder cases we soon see improvement. The graver cases, however, of this affection soon manifest symptoms not at all easy to discriminate from the ordinary symptoms of membranous croup; in both we have the gradual increase of pallor and prostration, the weakening and extinction of the voice, the hoarse, barking cough, and the laryngeal whistling giving place to silence, the dyspnœa becoming more and more intense, till death ends the scene.

Thus we see that in very young subjects the confusion is almost inevitable between simple laryngitis and membranous croup, but this is not prejudicial to the patient, since the same line of treatment is applicable to both cases. The prognosis, however, is different, and it is easily understood that tracheotomy gives better results in the first case than in the second.

The difficulties of diagnosis between membranous croup and laryngismus stridulus are much less great, and you will hardly fail to know the latter when you see it, if you will keep in mind the classical description. The little patient is attacked suddenly in the night with a paroxysm of suffocation. The child was in perfect health the evening before, or had only a slight cold. Respiration is obstructed and occurs with convulsive struggles and crowing inspirations. There is a sonorous cough, and a peculiar hoarseness of the voice. During the paroxysms the child is in the greatest distress, and asphyxia seems imminent. The family in the utmost alarm summon the physician. Here is an opportunity for a brilliant triumph of therapeutic skill; you can very easily subdue this false croup by the use of two remedies, chloral and bromide of potassium. When your patient is very young, under two years of age, I advise you to employ bromide of sodium in the dose of 7½ grains. This dose may be given in a teaspoonful of syrup of chloral; the whole may be administered in a cup of warm, sweetened milk, to which the yoke of an egg is added. [The strength of the French syrup of chloral is fifteen grains to the tablespoonful.] For older children you may administer in the same vehicle the bromide of potassium, in the dose of 7½ to 15 grains, and you may double or even quadruple the dose of syrup of chloral.

I have felt it to be my duty to emphasize the importance of correct diagnosis, for before you undertake to treat a case of croup you ought to be sure that you have a case of croup to treat. When once you shall have recognized in your patient the symptoms of membranous laryngitis, symptoms which I need not describe to you, and for whose full exposition I refer you to your treatises on clinical medicine and practice, you have two methods of combating this dire affection and these are—(1) medicinal, and (2) surgical.

(1) The medicinal methods are absolutely identical with those which I have indicated for diphtheria angina, and the difference in the localization of the disease necessitates but slight modifications in the treatment.

These modifications affect especially the mode of application of the remedy. While it is an easy matter to make applications directly to the pharnyx, it is extremely difficult to medicate topically the windpipe. When treating of diseases of the lungs I pointed out to you how hard it is to make medicinal substances penetrate the air-tubes, and demonstrated how little service cold pulverizations can render. Hence, swabbing of the larynx and insufflations of powders have been recommended. All these means, so difficult of accomplishment, should be abandoned, and you should rely on the steam atomizer, whose medicated vapor moistens the upper part of the larynx, and is about the only topical agency which I advise.

Another indication to fulfil is to promote expectoration of the false membrane in the air passages. You understand the utility and the necessity of this therapeutic measure. Unhappily we have no expectorants of real utility except the emetics, which only indirectly favor expectoration; at the same time the efforts of vomiting promote the expulsion of the false membranes, and it is advantageous to avail ourselves of their aid.

In these cases three medicaments are especially recommended, ipecac, sulphate of copper, and apomorphia. Ipecac is the expectorant by far the most used; as an emetic it is the safest. Unfortunately it does not always produce vomiting, and one is obliged to have recourse to the sulphate of copper in the dose of 50 centigrammes (7 grains) in mucilage. Sulphate of copper is somewhat harsh in its action, but it may render you great service in these cases.

A priori apomorphia ought to be the best of emetics, since it is capable of employment in subcutaneous injections, which is a great advantage in the case of young children affected with sore throat, who refuse often with extreme obstinacy all the medicines which you try to give them by mouth. Apomorphia, in the dose of one-sixth grain for the adult, one-twelfth grain for young subjects of from eight to ten years, one-thirtieth grain for children of a still younger age, promotes vomiting in a few minutes after its introduction under the skin. It is, however, a medicament which very readily undergoes change, and on the other hand its action seems to be feeble in cases where hæmatosis is retarded as in asphyxia; finally, it is a toxic substance which in some cases determines symptoms of supreme gravity, as Pecholier has recently shown, and as I have myself pointed out. These circumstances have led to the virtual abandonment of apomorphia in the treatment of membranous croup.

Besides medicated inhalations, expectorants, and emetics, besides a tonic regimen, there remains but little to be done, from a medical point of view, in the treatment of croup. These are you see, arms of little potency to combat so formidable a malady.

At the same time, if we lack medications of great activity, there are kinds of treatment that are dangerous, such as revulsives and blood-letting. Considering diphtheritic laryngitis as a veritable inflammation, sôme physicians have undertaken to combat it by antiphlogistics, and they have even applied vesicatories, or (what is worse still) leeches to the larynx and chest. This practice is to be mentioned only to be condemned, it weakens the patient and, by the denudation of the epidermis, favors the production of cutaneous diphtheria. You ought then to refrain from all such measures.

Struck with the importance of keeping patulous the windpipe, Bouchat thought that one might obviate the dangers which result from the presence of false membranes by tubes introduced into the glottis. I was interne of the Hospital St. Eugenie when the first trials of catheterization of the glottis were made by Bouchat; these first attempts did not seem very encouraging and the method never became general. This practice has lately been revived by Von Huttenbrenner, with, however, no better success.

(2.) When, in consequence of the progress of the disease, and the failure of internal medication, you find yourself powerless to prevent the more and more frequent return of the suffocative paroxysms, and the gradual progressive asphyxia which results, it is your duty to intervene surgically and perform tracheotomy.—*Medical Record.*

In the *Brit. Med. Journ.*, 1882, vol. ii. p. 169, Dr. Dreschfeld reported his first observations in the treatment of phthisis by iodoform. The favorable opinion then formed has been still further strengthened. Of sixty-four cases of confirmed phthisis, thirty-four had been under treatment sufficiently long to be available for the purposes of this communication. Of these thirty-four cases, four were in so far advanced a condition that the iodoform was only borne in the form of inhalation, but gave no results; two cases were complicated with amyloid disease, and here also the iodoform was useless. Of the remaining twenty-eight cases ten showed either no improvement or only a temporary improvement (increase of weight, improvement of appetite, decrease of cough and expectoration); while the physical symptoms showed no alteration at first, but afterwards the phthisical process gradually advanced, and associated again with loss of flesh, night-sweats, etc. Of the remaining eighteen cases, some showed slight but steady improvement, broken only temporarily by a fresh cold or some complication, such as gastric catarrh, pleurisy, etc.; whilst in six cases the improvement was most marked and beyond all expectation, the increase in weight amounting in one case to fourteen pounds, in another to ten pounds, and in a third to eight pounds in one month. The physical symptoms also improved; the sputa, however, continued to contain tubercle-bacilli. The iodoform treatment was also tried in six cases of incipient phthisis. Of these, two had only been under treatment a very short time. Of the four remaining cases, two showed no improvement, one was at once benefited; cough and expectoration entirely ceased, the apex-catarrh disappeared, and the patient felt now perfectly well. In the second case the treatment was equally successful—only, however, after having been continued for longer time. There being an almost entire cessation of cough, it was difficult to obtain any sputa; one specimen, however, was obtained, and this was found free from bacilli, whilst before they were found abundantly. Two cases of laryngeal phthisis, treated both by inhalation, and also locally by the application of iodoform powder to the ulcers, gave satisfactory results; the ulcers cleared and became smaller, and the general condition improved. The iodoform was given in the form of pills (one grain of iodoform, two grains of croton-chloral, one minims of creasote) and in the form of inhalation (twenty grains of iodoform, twenty minims of oil of eucalyptus or ten minims of creasote, and half an ounce each of rectified spirit and of ether). The inhaler used was one devised by Dr. Roberts,

consisting simply of horsehair matting, to the inner side of which was attached some flannel or cotton-wool, and on this the inhalation-mixture was dropped. The cost of the inhaler was about three-pence. Where the pills were badly borne (especially in women), the iodoform was added to cod-liver oil. In very young children, iodoform inunction, made with olive oil or vaseline, was to be recommended, while older children seemed to take iodoform, either as powders or in small pills, very siwell. The good effects of iodoform seemed to consist in the following: 1. Increase of weight; 2. Increase of appetite; 3. Diminution of cough and expectoration; 4. Diminution or even total cessation of night sweats; 5. The temperature was often a little lowered. No symptoms of iodoform intoxication had ever been seen. Several medical men who had tried the iodoform treatment, had also obtained every satisfactory results.—*Brit. Med. Journ.*

THE TREATMENT OF SPERMATORRHŒA.

Dr. H. Coupland Taylor thus sensibly writes in the *Brtt. Med. Jour.*, March 24, 1883:

Obstinate cases of spermatorrhœa and frequent nocturnal emissions constantly come under the care of the practitioner. Too frequently the medical man consulted simply tells the patient that, if he breaks off the pernicious habit of masturbation, which has probably originated his malady, he will soon quickly recover. But in fact, in most cases, the habit has already been abandoned before he comes to seek advice; and these cases do not get well for months or even years afterwards, unless proper measures be taken. Knowing that he has left off this bad habit, and that he nevertheless does not improve, his complaint being made light of by the regular practitioner, and being greatly depressed in mind, he seeks the advice of the quack, who is always ready to benefit by these cases. I will give an outline of the treatment I have followed, and which I have found most successful in several such cases. The treatment should be: 1. Moral; 2. Hygienic; 3. Medicinal. 1. *Moral. a.* The pernicious habit of masturbation, which has probably been the origin of the complaint, must at once be discontinued, or no good can result from any treatment. *b.* The thoughts should be directed from himself by his having regular work and exercise. *c.* The anxiety of mind which ensues should be allayed as much as possible, and a happy state of mind instituted. 2. *Hygienic. a.* The patient should have regular but not excessive mental employment, and bodily exercise in the form of walking, riding or outdoor sports and games. *b.* Cold sponging of the genitals night and morning for some minutes, or as long as can comfortably be borne, is a most important agent in giving tone to the relaxed organs. *c.* The patient should have a hard mattress, and as little and as light clothing as possible at night. Care should be taken not to lie on the back, which may be prevented by wearing a knotted towel over the spine, or by some other device. *d.* No quantity of liquid should be taken before retiring to rest, and the bladder should be emptied the last thing. 3. *Medicinal.* A mixture containing tincture of perchloride of iron and tincture of nux vomica should be given twice or three times a day; also a pill containing a fourth or a third of a grain of extract of belladonna with three grains of camphor should be given at first every night, and then every other night, immediately before going to bed. If these lines of treatment be adhered to, the patient, whether suffering from real spermatorrhœa or simply from frequently returning nocturnal emissions, will steadily improve, and the emission will occur less and less frequently, till, in the course of a few weeks, or possibly months—for a malady of long standing (as this usually is) is never cured immediately—they will cease altogether, or only occur at such intervals as may be deemed normal, and in which there is no harm whatever.

SULPHUROUS ACID IN SCARLATINA MALIGNA.

In the *British Medical Journal* Dr. Keith Norman Macdonald, after denying the prevalent opinion, that no reliance can be placed on any drug in cases of scarlatina, does not hesitate in affirming that, when properly applied, both locally and internally, sulphurous acid is by far the most efficacious remedy we possess. He continues: "I have had several opportunities of testing its efficacy in some of the worst cases I have ever seen, during the epidemic which has been rife in this town (Cupar Fife) for the last two months, and I am bound to say that, of all remedial measures in this disease, it is, in my opinion, the most reliable. My treatment is as follows: The moment the throat begins to become affected, I administer to a child, say of about six years of age, ten minims of the sulphurous acid, with a small quantity of glycerine in water, every two hours, and I direct the sulphurous acid spray to be applied every three hours to the fauces for a few minutes at a time, by using the pure acid in severe cases, or equal parts of the acid and water, according to the severity of the case. Sulphur should also be burned in the sick chamber half a dozen times a day, by placing flour of sulphur upon a red-hot cinder, and diffusing the the sulphurous acid vapor through the room, until the atmosphere begins to become unpleasant to breathe.

"In the worst cases, where medicine cannot be swallowed, this and the spray must be entirely relied upon; and the dark shades which collect upon the teeth and lips should be frequently laved with a solution of the liquor potass permanganatis of the strength of about one drachm to six ounces of water, some of which should be swallowed, if possible.

"In cases presenting a diphtheritic character, the tincture of perchloride of iron should be administered in rather large doses in a separate mixture with chlorate of potash, and equal parts of the same with glycerine should be applied locally, with a camel's hair brush, several times in a day; but, as in the majority of cases among children it is next to impossible to use a local application more than once; the spray and permanganate solution will then prove of great service.

"As to other remedies recommended by various authors, ammonia is nasty, and cannot be taken well by children; carbolic acid has the same fault, and cannot be applied properly. Gargles are also useless in children, because they seldom reach the diseased surfaces, and warm baths and wet sheet packing are dangerous, because they are never carried out properly in private practice. The hypodermic injection of pilocarpine is a remedy that may give good results hereafter, but I have had no experience of its use."

HINTS FOR THE DIAGNOSIS OF OVARIAN TUMORS.

Dr. A. MacDonald gives the following hints in the Edinburgh *Medical Journal* for November:

1. *Pregnancy.*—The possibility of pregnancy, the signs and symptoms of pregnancy, and waiting if in doubt, place the diagnosis beyond possible mistake, with a fair measure of care.

2. *Fibroid.*—A large fibroid with solid walls, leading to general enlargement of the uterus is easily diagnosed. The increased length which the sound enters, the fact that the uterus moves with the sound, the peculiar feel of the uterus, and the nearly constant menorrhagia, suffice to keep the diagnosis correct. It is quite common to hear a bruit in a case of uterine fibroid; only in vascular sarcomata is such audible if the tumor is ovarian. But much greater difficulty is experienced in cases of fibro cystic tumors connected to the uterus, with or without pedicle. In that case we must try to ascertain whether the tumor is connected or disconnected with the uterus. Then the cyst of a fibro-cystic tumor may be tapped, when we expect to find only a thin fluid of great density, with some blood corpuscles, and possibly some non-striped muscular fibres. But in those cases it is often found that only an exploratory incision can determine the diagnosis with accuracy.

3. *Renal Cysts* begin below the false ribs and extend downward and forward. They have a line of resonance between them and the liver. due to the transverse colon, which is of value, as showing they are not of hepatic origin, and when aspirated they contain urea. Usually accompanying such there are urinary symptoms, but not always.

4. *Ascites* exhibits the characters of free motion of fluid to an imperfectly filled cavity. Accordingly, when the patient lies on her back, the abdomen is flattened anteriorly, the flanks give a dull note, and there is clearness round and above the umbilicus. With change of the patient's position, the areas of resonance alter. Thus, if the patient is turned on her left side, the right flank gives a clear note, and *vice versa*. In case of tapping, an ascites, the thick gelatinous fluid characteristic of ovarian tumor is never obtained.

5. *Hydatid Cysts of the Liver.*—In this case the tumor grows from the liver, distending first the distance between the ensiform cartilage and the umbilicus, the reverse of an ovarian cyst. Again, tapping and discovering acephalocysts in the fluid is convincing evidence of the true nature of the tumor.

6. *Hysterical Abdominal Distention*, commonly known as spurious pregnancy, need deceive no one, as the percussion is uniformly resonant, and the tumor disappears under chloroform.—*Can. Lancet and Clinic.*

APHTHOUS SORE MOUTH OF INFANTS.

Prof. Wallace, Phila., believes that the sodium sulphite solution is the best remedy for aphthous sore mouth in infants. ℞. Sodii sulphit., gr. xxx; glycerini, aquæ, a a ℥ ss. M. To be used on a swab every two hours. Where the child is using a nursing bottle, scrupulous cleanliness is required. The rubber nipple should be turned inside out after each time of using, washed clean, and placed in a solution of bicarbonate of sodium (baking soda), in a tumbler, until again needed. It is better to have two, and use them alternately. Milk must never be allowed to stand in the nursing bottle until it becomes sour.—*Col. & Clin. Record.*

INHALATION OF MEDICATED VAPORS IN DISEASES OF THE RESPIRATORY ORGANS.

Guillemin (*Archives Med. Belges*) summarizes his views as follows:

1. The affections of the mucous membrane of the respiratory passages may in certain cases be advantageously treated by inhalations of medicated vapors.

2. In the first stage of acute inflammation of this mucous membrane, pain, cough, and painful sensations, which are the consequence of irritation and dryness, are rapidly calmed by inhalations of warm, moist and aromatic vapors.

3. The calming action is still more decided if to the liquid, which serves for inhalation, there be added a small quantity of certain volatile calmative substances, such as ether, distilled cherry-laurel water, or conium.

4. Frequently renewed inhalations of essence of turpentine, when they are administered at the commencement of the first period of inflammation, may arrest its progress.

5. The vapor of iodine exercises an irritant action on the mucous membrane of the air-passages. It induces efforts of coughing, and augments the secretion of the mucus of the air-passages. This irritating action may be utilized : (*a*) To diminish the swelling of the mucous membrane by causing the inflammation to pass from the first to the second stage; this indication is present especially in cases where the inflammation occupies the small bronchi; the swelling of the mucous membrane is sufficient to give rise to fear of respiratory insufficiency. (*b*) To diminish the vicosity of the products of morbid secretion by their admixtures with the mucus, of which the vapors increase the formation. (*c*) To induce efforts to cough, and to disembarrass the air-passages from the products which are there accumulated.

6. It is not only by its irritating properties that the vapor of iodine modifies the mucous membrane of the air-passages. Iodine in reality possesses the property of stopping purulent secretions, and, on the other hand, it arrests and prevents putrescence. Thus, when the mucous membrane of the air-passages yields a purulent secretion, resulting either from an acute inflammation in the third stage, or from a chronic inflammation, the inhalation of iodine will determine by degrees the quantity of pus, and finish in certain cases by entirely changing the nature of the secretion, which becomes completely mucous.

7. Although the essence of turpentine, in the fluid condition, is a sufficiently powerful irritant for the tissues with which it is placed in contact, inhalation of this essence is easily supported by the mucous membrane of the air-passages. It only brings on very moderate irritation, and very rarely provokes fits of coughing.

8. When the mucous membrane is affected, and yields a product of secretion, these vapors have the effect of diminishing the quantity and augmenting the consistence of this.

9. If the product of the secretion be purulent, the inhalation of essence of turpentine, continued during a sufficiently long time, progressively diminishing the quantity of pus, may, in certain cases, completely stop the secretion. The inhalations are indicated in all affections of the larynx, of the trachea, and of the bronchi, when accompanied by a very copious muco-purulent secretion without vicosities. On the other hand, the use of them must be avoided whenever expectoration is difficult, in consequence of the too great viscosity of the products of secretion.

10. In cases when these products are at the same time very copious and very viscous, it is possible, by alternate inhalations of vapors of iodine and vapors of turpentine, to rapidly diminish the quantity of secretion without increasing its vicosity. The inhalation of iodine should always be used in the first instance.

11. Inhalations of essence of turpentine is indicated in hemoptysis, and is very successful in cases of hemoptysis of average intensity.—*Detroit Lancet.*

THE PATHOLOGY AND TREATMENT OF BURNS.

By J. Brindley James, M.R.C.S., Late Assistant House Surgeon, St. Bartholomew's Hospital, Chatham.

Introduction.

There is no accident calling for prompter treatment at the hands of the general practitioner than that painful injury, a burn; and it is an incumbent duty on him to collect as much practical information as possible relating to this frequent emergency : a more fit or interesting subject I could scarcely select for inviting the attention of the professional reader.

Great differences of opinion exist to the present time among the most experienced surgeons with regard to the treatment best adapted to this painful accident, each one extolling his own favourite remedy, and advocating its use to the exclusion of all others; and, in my opinion, burns have been treated in past ages in a purely empirical fashion, without any regard to fixed principles. But before proceeding further on the subject of treatment, I will endeavour to give some general descriptions of the nature of a burn.

Pathology.

The application of a heated substance to the surface of a living body gives rise to the injury designated a burn, the degree of such injury being proportionate to that of the heat of the substance applied, varying also according to the nature of the substance, and the period during which it is applied to the body. A burn due to oil at a boiling temperature will prove far more severe than when caused by boiling water, the former possessing a greater capacity for caloric than the latter, and its temperature, consequently, being higher in proportion. Oily substances, moreover, adhering with more tenacity to the skin, while water merely flows on it, the degree of injury must be proportionate. Heated metals will burn more severely than either oil or water, while such substances as burn rapidly and enter into a state of fusion (such as phosphorus, sulphur, and the resins) cause the deepest burns. By a *burn* proper we designate injury from application to the body of extreme heat through the medium of a solid body, or of actual fire; but a *scald*, a similar injury due to the contact of heated liquids or vapours; but the foregoing shows their action and effect to be analogous.

Burns have been variously classed by different authors.

Hester divides them into four classes or degrees : —(1st) heat and redness; (2nd) blisters; (3rd) when an eschar is formed; (4th) where all the tissues are destroyed to the bone.

Dr. Kentish divides them into two classes :— (1st) where the action of the parts is alone increased; (2nd) injuries where the action of *some* parts is increased, and the organization of other parts destroyed.

Dupuytren's classification into *six* varieties is that most generally recognized by all modern surgeons :—(1st) erythema, or superficial phlogosis of the skin, without vesicles; (2nd) inflammation of the skin, with detachment of the cuticle, and formation of vesicles filled with serum; (3rd) destruction of a part of the corpus papillare and rete mucosum; (4th) disorganization of the cutis completely down to the subcutaneous cellular tissue; (5th) when,in addition to the cellular tissue, the deep structures (muscles, fasciæ, vessels, &c.) are destroyed and reduced to a black charred mass; (6th) when the whole thickness of a limb, including the bone, is implicated.

General Pathology.

In all burns there must be pains, more or less severe, according to the degree of injury; for though acute in all such injuries, it is more intense when the *surface only* of the skin is implicated than when its texture is deeply destroyed; while every burn varies according to its depth, its extent, the patient's constitution, &c., while its effect may be purely local, or may give rise to constitutional disturbance endangering more or less the life of the sufferer. Where a burn produces only an erythematous redness of the skin, but is of wide extent, the nervous and vascular systems become affected, and much pain is produced; but should the epidermis be removed by it, and the papillary surface beneath exposed, the pain is more severel and the effect on the nerves and vascular systems proportionately increased. Where the papillary surface itself is destroyed the pain is far greater and more prolonged than in the preceding instance. When disorganization of the whole integument has taken place, the pain continues only while the cause acts and the effect on the vascular and nervous systems is less marked; but inflammation will commence in four or five days tending to the separation of the dead parts, and the suffering then becomes intense. In proportion to the depth of tissue destroyed so is the time required for their separation, and also that required for the healing of the injured parts.

Symptoms.

The local symptoms of burns may be divided into three classes: (1st) where there simply exists inflammatory action tending to resolution; (2nd) where this action terminates in suppuration; (3rd) where there is complete destruction of the part. In the *first* class we find: sharp pain, the part of a bright red colour, somewhat resembling erysipelas in appearance, while vesicles filled with a clear transparent serum may be formed. Where the burn is slight, the pain and redness gradually disappear in a few hours perhaps, almost always in a few days, the case terminating by desquamation of the cuticle and resolution. Burns of this degree *may* prove fatal through excessive pain, especially in the case of children; and if situated in the head, inflammation may be conveyed to the brain through the medium of the vessels of the diploe, entailing convulsions, delirium, and coma, followed by death.

In the *second* class of burns, we find greater pain, with larger and more numerous vesicles, filled with a bloody serum, or a turbid milky fluid; the cuticle not unfrequently destroyed, exposing the rete mucosum and causing most severe pain; the parts swollen, bearing a more dusk-red appearance; and suppuration in such cases will generally commence on the fourth or fifth day. A new cuticle, of a bright red colour, will be subsequently formed.

Burns of the *third* class are effected by heat at a much higher temperature, or applied for a longer period than in the preceding. We have here a total disorganisation of the part, converting it into a deep yellowish or blackish dry mass, totally insensible to the touch, harder and tenser in proportion as its colour is darker; the adjoining skin is wrinkled (as if pinched up), the radiating folds around the burned part denoting the shrinking it has undergone. On the third or fourth day, an inflammatory circle forms around the slough, which is generally loosened between the fifteenth and twentieth day; the suppuration is then very copious, and granulations rise up with vigour.

The suffering produced by a burn may cause instantaneous death from shock to the nervous system; this frequently occurs where the victims are nervous females or children. Where instant death does not result, the sufferer sinks into a state of stupor and prostration, the pulse becomes small and rapid, the skin becomes cold and pallid on the uninjured parts, the respiration is slow and laborious, the limbs are motionless and abandoned to their own weight; the patient answers questions reluctantly and imperfectly, or perhaps, does not reply at all. This state of collapse may soon terminate either in death or in general re-action; in which case, these symptoms are accompanied by convulsions, spasms, and extreme restlessness.

Where the burn is superficial, and of no great extent, the formidable symptoms mentioned above do not occur, but a general re-action takes place. The pulse becomes frequent and strong, the skin hot, the tongue dry and red (denoting irritation of the digestive organs), while thirst, nausea,vomiting, constipated bowels, loss of appetite, &c., occur.

In extreme burns, remarkable difficulty of breathing and oppression of the lungs will be seen. Dupuytren attributes these symptoms in the first place to the impression made on the organs of circulation and respiration, and then to the secondary development of intense bronchitic irritation or considerable pulmonary congestion. Considering that the skin and lungs both eliminate carbonic acid from the system, may it not be assumed, in cases where a considerable portion of the skin has been destroyed, that these symptoms are due to the lungs being called upon to eliminate a larger quantity of carbon than usual, to counterbalance the diminution of this function in the injured skin?

Supposing the patient to have surmounted all these dangers, others still await him. In severe cases, the profuseness and prolonged continuance of suppuration frequently exhausts his strength, inducing hectic fever, great emaciation, and finally, death. This stage is characterised by the symptoms accompanying the latter stages of all chronic diseases.

Prognosis.

Our prognosis in cases of burns is determined by the extent and depth of the injury, its situation, the nature of the originating cause, and by the age and constitution of the patient. According to Dupuytren, strong sanguineous persons are more exposed than others to such unfavourable symptoms as characterise excessive inflammation; while the aged and weakly constituted are more likely to sink under the effects of excessive suppuration. Burns occurring on the head, thorax or abdomen are far more dangerous than if situated on the limbs. When they extend through the whole thickness of the integument, they may give rise to frightful deformities, more especially in the neighbourhood of the face, neck and joints. This is due to the contraction of the cicatrices, and often results in most fearful disfigurement; the chin may be drawn down towards the sternum, the angle of the mouth towards the chin, or the mouth itself so deformed as to deprive the unhappy patient of the power to restrain the saliva from trickling down the chin, and give the countenance a most horrible appearance; the head may be forcibly drawn down to the shoulders, or the nape of the neck rendered adherent to the bank; the fingers may adhere together or be tucked inwards, owing to loss of power of the extensor tendons, or the hands and feet may be otherwise distorted. Where the thigh has been chiefly injured, it may become adherent to the abdomen; but should the burn be very deep, involving the muscles and tendons, there is great danger of the patient totally losing the use of his limbs. In cases where the bones are exposed during suppuration, necrosis may take place: if in the neighbourhood of a joint, the synovial membranes may become inflamed, and anchylosis result. Burns of the eye may cause ophthalmia and dusky vision, from opacity of the cornea, where their effect has penetrated more deeply total disorganization of the eye may be produced.

Post Mortem Appearances.

On investigation after death, traces of congestion or inflammation of the lungs, brain, or bowels may be detected; but the organ most frequently affected is that in the immediate vicinity of the injured part; thus, in a case where the face is the part burned, and the patient having survived the irritative stage, dies when that of inflammation supervenes, the brain is frequently found in an inflamed or congested condition, with slight effusion into the ventricles. The same observations may be applied to the chest and abdomen, with respect to the organs connected with them.

But where the patient has died in the inflammatory stage, effusion of serum into the cavities of the serous membranes is the most frequent result, and we invariably find that this class of membranes suffer more than the mucous ones, except in cases characterised by long protracted suppuration, when the mucous lining of the intestines is always found inflamed; in some instances ulceration of the intestines has been found to have occurred, more especially of the ileum and stomach.

Treatment.

The treatment of burns may be divided into, (1st) constitutional, (2nd) local.

(1st) *Constitutional treatment.* A severe burn having occurred, the first thing to do is to bring about a salutary reaction. The patient is in a state of extreme depression, suffering acute pain, is cold, trembling and shivering, and, unless properly supported, very likely to sink under the shock. A full dose of Liquor Opii Sedatium should be given at once (duly proportioned to the age of the patient) in some brandy and water, and repeated, if necessary, in the course of an hour or two.

When the body is at once extensively and superficially injured, immersion of the patient in a warm bath gives instantaneous relief, assuaging pain and removing depression.

When reaction has set in, the bowels should be kept open by a mild saline aperient. Should inflammatory symptoms arise in connection with the head, chest, or abdomen, appropriate treatment according to their nature should be adopted. In these cases leeches and blood-letting are sometimes necessary; but in the vast majority of instances it is on *stimulants* we must principally rely. Ammonia and bark, brandy and wine should be freely given, with a sufficiency of nourishment, while the irritability of the nervous system must be soothed by frequent doses of opium. At a later period, when the discharges have impaired the strength of the patient, this tonic and stimulating plan must be actively continued.

(2nd) *Local treatment.*—The burned clothing having been removed, the patient should be laid upon a blanket, and, whatever be the degree of the burn, he should be well covered with fine wheaten flour by means of an ordinary dredger. It should be laid on thickly, but also uniformly and gradually; this forms a soft and soothing application to the surface. Where the cuticle has been abraded or vesicated, the flour will form a thick crust by its admixture with the serum discharged from the injured surface. The crusts thus formed over the surface of the burns should not be disturbed until they have become loosened by the discharge, and then they should be removed; the ulcerated surfaces thus exposed must be dressed with water-dressing, red-wash, or lead ointment, according to the amount of irritation existing; the surrounding sore must be treated on ordinary principles. In some cases, lint dipped in the "Carron Oil," composed of equal parts of linseed-oil and lime-water,

to which a small quantity of oil of turpentine might advantageously be added, has appeared to act with more efficacy than anything else; while in others cotton wadding answers admirably. Whatever be the local applications employed, change the dressings as seldom as possible, and only when they have become loosened, or offensive from the infiltration of the discharges. It should be borne in mind that each fresh dressing causes very severe pain to the patient, and produces depression, thereby materially retarding the progress of the case.

Hoping that I may have succeeded in condensing within the limits of this scanty outline the more salient points in connection with so fearfully common an accident as injury by burning, and which may claim the practitioner's services at any moment's notice, I shall feel deeply gratified if any of the remarks it contains can ever prove of the least service to any of the readers of this paper.—*London Students' Journal and Hospital Gazette.*

TREATMENT OF SUMMER DIARRHŒA IN CHILDREN.

Dr. A. Muller (Transactions of Lancaster County Medical Society.) Attention to diet is a very important point in the treatment of diarrhœa. In regulating the diet, we will often remove the cause of the disease, which is commonly induced by improper food, and which may often be remedied by attention to this point alone; while no medicines will be of any account if this be neglected. In the begining of the attack, gum-water and barley-water form very good articles of food and drink. Milk had better be diluted with water, even to the extent of one-half, as in its pure state it is almost always too strong for the delicate stomach and yet more sensitive intestines. Rice forms a very good article of food, if thoroughly boiled (especially if the child is not at the breast), as it, as a matter of food, leaves very little excrementitious matter. But if the child is nursing, the mother's milk is sufficient; and by far the best diet for it, provided her health is in a good condition. Keeping the surface warm and the skin in a good condition are very important in the treatment of diarrhœa, hence the utility of warm clothing, warm baths, fermentations to the abdomen, and friction. A flannel bandage around the abdomen is often of great service, both from the warmth it imparts, and the supports it gives to the viscera within. The feet should be kept warm. Pure air and an equable temperature are also very essential.

As to medicines, the question of giving an aperient at the onset is to be considered. If the child has been fed on improper food, and we have reason to think that indigestible articles of diet are in the alimentary canal, it is proper to begin the treatment with an aperient, in the shape of castor oil, magnesia, or some one of the preparations of rhubarb. But when the infant is very young, and fed on nothing but the mother's milk, and the evacuations profuse, we must in all cases try to moderate the discharge from the bowels. This can be done by the exhibition of some of the vegetable astringents, either alone or combined with opium in properly guarded doses and antacids. A very good method of administering opium is in the form of Dover's powder, where we have the sedative effect of the opium and the diaphoretic action of the ipecacuanha. Although some may object to giving opium to a very young child, we meet with cases in which the pain and tenesmus are so great that it is our sheet anchor. Mercurials are also very necessary sometimes, where there is a lack of bile in the evacuations, they being white or clay-colored. The form in which I generally give it is the hyd. cum creta. When we have green and acid stools, some of the antacids are to be given in the form of lime-water, creta prep. or chalk mixture. In case of high fever nitre may be given, in the form of nitrate of potash or spts. ether nit. When diarrhœa has long existed, the use of turpentine is occasionally of great service, especially if much flatus exists in the bowels. In cases where the head is involved, or likely to become involved, great benefit will be derived from the use of blisters on the side of the head, back of the ears or the nape of the neck. Cold in the form of cloths wrung out of ice-water to the top and front of the head at the same time to be used.

THE TREATMENT OF PRURITUS URETHRÆ DURING GONORRHŒA.

During the third stage of gonorrhœa a very unpleasant and often distressing symptom that sometimes arises is the occurrence of a most intense itching along the course of the urethra— a condition not common or not often distressing enough to attract much attention from writers.

In the case of the patient which illustrated most strikingly this complication, in each of three successive gonorrhœas the itching had been so intense as to be almost unendurable, a little relief being obtained by kneading such portions of the urethra as could be brought into position against the arch of the pubes. Various injections were tried in vain, astringents seeming to aggravate the pruritus, others giving but a few minutes relief.

Finally it was found that by moderately distending the urethra with a cold steel sound (No. 16 Am. scale in this case) the trouble was instantly and completely relieved, but would return again in from twelve to twenty-four hours, the distress being such that the patient would run into the office and ask that the sound be passed immediately.

If the urine were passed soon after the withdrawal of the sound, small yellowish bodies were seen floating about, which under the microscope

proved to be masses of pus corpuscles, These were found independent of injections, since medication of all kinds had been discontinued.

It was soon found that this method of treatment had its disadvantages; although it relieved the pruritus, the frequent passage of the sound so early in the course of the disease aggravated the periurethral effusion and in one instance chordee returned, making it questionable if anything had been gained. Afterwards the warm sound and the flexible catheter were found equally efficient, and it began to be evident that *distention* of the urethra was the important factor in the problem.

Finally the trouble arising from the frequent passage of instruments was eliminated in the following way; the patient was directed to hold the end of the penis firmly between the thumb and index finger in such a way that no urine could escape, then to make an effort to pass his urine, in this way thoroughly distending the urethra and keeping it distended for one or two minutes, the sensations of the patient to be the guide as to the amount of force to be used. This measure has proved entirely successful, the period of relief is as long as that obtained by the sound, the relief is as complete, and no unpleasant consequences have followed.—*Jour. of Cutaneous and Venereal Diseases.*

MINOR DYSPEPSIA.

This is the subject of an interesting paper read by Dr. W. R. D. Blackwood before the Philadelphia County Medical Society, January 10, 1883, and printed in the *Medical Times*. The causes of the ailment he specifies as bad cooking, hurried "bolting" of food at table, imperfect digestion in the stomach (through impaired function), and defective duodenal digestion. After dwelling at length on each of these, and remarking that "in all forms of indigestion prevention is better than cure," he proceeds to consider the treatment to be adopted. The indiscriminate use of bitters, cordials, and the like is condemned as "indefensible on rational grounds." Most of the artificially prepared pepsins and pancreatines are pronounced worthless. Bismuth "has been blindly handled, especially in combination with pepsin, whose action it neutralizes." What follows seems to us worth quoting in full:—

The nitro-muriatic and phosphoric acids are much better, and, if urgent need prevails, the administration of a soda or potassa salt for a short time will do much more service than either the subnitrate or the subcarbonate of bismuth. In all forms of dyspepsia strychnia or nux vomica is extremely valuable; and where acidity or constipation is present, very small doses of belladonna, with at times cascara sagrada, will remove the difficulty.

Regular exercise, especially equestrianism, is very efficient in atonic conditions, and, where this cannot be had, walking, together with abdominal massage, is good. General faradization of the abdomen is an admirable method of toning up the peristaltic action, particularly in constipated patients; whilst galvanism is unusually efficient in hepatic torpor, and static electricity in my hands has acted promptly, thoroughly, and permanently in revealing the dyspepsia so common in nervous, hysterical school-girls. Where liver congestion exists to a decided degree, the employment of mercurials, such as calomel, blue mass, or hydrarg cum creta, is better avoided, because of their blood-defibrinizing quality, and recourse should be had to one or more of the efficient agents long used by the eclectic fraternity, and lately investigated in a series of exhaustive experiments by Rutherford and others. Of these, podophyllin, irisin, and euonymin are the most valuable; but I am in the habit of combining them with very felicitous results, and at the risk of being criticised I annex a favorite formula, used for many years; and it is, I may say, the only one approaching the so-called "shot-gun" prescription which I ever use, my habit otherwise being to order simply one ingredient, or at the most, and that rarely, three, in any one recipe:—

Cinchonidiæ sulphatis,
Euonymin,
Irisin,
Leptandrin,
Juglandin. . . . . aa 3 ss
Podophyllin,
Ext. belladonnæ,
Ext. nucis vomicæ,
Ext. hyoscyami . . . . . aa gr. x.
M. In pil. no. 60 div.
Sig. One or two at bed-time.

Many a stubborn case of dyspepsia, that had run the gauntlet unavailingly of all sorts of peptonoids, has given way to this, and it is an admirable cholagogue on general principles. In scrofulous subjects, with deficient nutrition, I have had much benefit from minute doses of mercuric bichloride (the one hundreth of a grain) in tinct. calumbæ comp., the dose being a drachm of the latter thrice daily. Within a few weeks a most interesting case, treated by several physicians for organic cardiac lesion, has recovered under the remedies just alluded to. The palpitation, the supposed dilatation with compensating hypertrophy according to canonical dicta, has subsided; the patient can lie down, and sleep too when recumbent; he has no night tremor or dread; he can run up-stairs or after a car; he can eat, drink, and be merry now, whereas before he was morose, taciturn, and a family nuisance; in short, he has dropped a minor dyspepsia, and with it a prognosed incurable heart-trouble. Dyspepsia, like charity, covers a multitude of troubles and sins, and a good deal of the "malaria" so fashionable with the fraternity, and with the laity also, is one or an other form of indigestion.—*Boston Journal of Chemistry.*

MANGANESE IN AMENORRHŒA.

Drs. Sydney Ringer and Murrell write to the following effect:

"We are desirous of calling attention to the value of a very simple remedy in a very common complaint. For some time past we have used permanganate of potash with much success in the treatment of certain forms of amenorrhœa, and are satisfied of its value. Our observations have extended over a period of thirteen months, and we have now notes of sixty-nine cases. The majority occurred in hospital practice, but some were private patients. A small number remained under observation for a few weeks only, but the majority continued to attend for a much longer period; so that in some instances we have a complete record of the menstrual history for a year or more. In some cases the amenorrhœa was the cause of the patient seeking advice; in others its existence was mentioned incidentally, the patient suffering from some other complaint. Our cases are such as come under the care of the general, as distinguished from the obstetric, physician, and do not include those requiring operative interference. As a rule we refrained from making a vaginal examination, but with this exception our notes are complete. We have used the permanganate in two forms, first, the pharmacopœial solution, and, secondly, the permanganate made into pills, each containing either one or two grains. Generally we begin with a grain three times, and then gradually increase the dose to two grains four times a day. Our most striking results have been obtained with the larger doses; a large dose sometimes succeeding admirably after the failure of a small one. Before commencing treatment we inquire carefully into the menstrual history of the patient, and as a rule give the remedy only for the three or four days immediately preceding the expected period, but should it fail to produce the desired effect we direct the patient to continue steadily taking it, and in some cases it has been taken continuously for nearly three months. In our experimental observations we have given the one drug only, and have done nothing in the way of accessory treatment. Our most striking results have been obtained in young women between the ages of eighteen and twenty-five, who from some accidental or trivial cause, such as catching cold or getting wet, have 'missed' once or twice after having been regular. The administration of one or two grains of permanganate of potash in pill three or four times a day for a few days before the time of the expected period will bring on the flow almost to a certainty. In some instances the periods were brought on after the patient had ceased menstruating for over a year. In the case of country girls who have 'seen nothing' for a month or two after coming to town the treatment has answered admirably. Often enough patients do not consult their doctor until they are 'overdue,' until the time of the expected period has passed by for some days. Even then the prompt administration of the permanganate will often bring on the flow at once, but should it fail to do so the treatment ought to be continued, and the patient will probably menstruate normally at the next monthly time. Generally our efforts are not crowned with success until the medicine has been taken for at least three or four days, but in some instances the permanganate acted with striking rapidity, the menstrual flow making its appearance after only two or three doses had been taken. It is not necessary to discontinue the treatment on the appearance of the menses; in fact we generally tell the patient to continue taking the pills three or four days longer, finding that it facilitates the flow. The permanganate often succeeds well after the failure of other remedies, such as iron, aloes, nux vomica, strychnia, pulsatilla, nitroglycerine, and hot mustard baths. Sometimes, however, it is necessary to give it for six weeks or even longer before the desired result is obtained. In those cases where the patient has menstruated only once or twice, and has then entirely ceased for some months, our treatment answers well; the menstrual function is re-established, and thenceforth proceeds normally at every successive monthly period, In some cases there was no actual amenorrhœa, but the flow was scanty, lasting perhaps only a single day, or it may be only a few hours. Here the administration of the permanganate prolonged the flow, and even in some instances when it had ceased brought it on again. In girls of about fifteen or sixteen, who have never menstruated at all, the permanganate, as might be expected, is not so certain in its action; but even here it not infrequently acts promptly, bringing on the flow at once. In some cases where the general health was bad, and the permanganate had failed, we suspended treatment for a time, and sent the patients into the country for a month. On their return we gave the permanganate a second trial, and it succeeded at once. We have, however, sometimes failed to bring on the menstrual flow even when the patient was in fairly good health, and when there were the usual indications of puberty. It is not only in the case of young women that manganese is so useful, it succeeds almost equally well with women between thirty-five and forty, who, as the result of many pregnancies and much suckling, have ceased to be regular. Here for example, is a typical case. A married woman came to us complaining that she was never regular. She had had nine children in as many years, and rarely 'saw anything' more than once between her pregnancies. She had been suckling for eight months, and had not been poorly for seventeen months—the nine months she had carried and the eight months she had suckled. She was not in the family-way, but she said she expected she would be soon if she weaned the baby. She did not know when she ought to be poorly, and had given up all expectation of seeing anything. She was ordered two one-grain permanganate of

potash pills four times a day, and came on poorly a fortnight after, the first time for seventeen months.

We need hardly say that before treating the amenorrhœa care should be taken to see that the patient is not pregnant, although we are satisfied that the permanganate given in the dose we recommend has no power to produce abortion either in the early or late stages of pregnancy. We find that manganese fails to induce the flow when the amenorrhœa is due to advanced phthisis. But in some cases of arrestetd phthisis the treatment was successful, and the patient after a time, under the influence of the permanganate, menstruated freely and at regular intervals. In several instances patients informed us that the pills had proved of value in curing 'whites' of long standing. As a rule the permanganate is taken without difficulty, but patients much prefer the pills to the solution. The solution is peculiarly disagreeable to take, and in some cases produces nausea and even vomiting. Patients frequently complained after taking the pills of a heavy persistent pain over the upper part of the sternum, 'as if something had stuck there and would not go down.' This was not due to the drug being given in the form of a pill, for the same complaint was made when the same dose was given in solution. One patient said the pain was of a burning character, and another said it was like heartburn. A girl of sixteen, to whom two two-grain permanganate of potash pills were given four times a day, said the pain, 'like a lump at the chest,' came on immediately after each dose, and was so intense that she had to go to bed for two hours. That the effects we have described are due to the manganese, and not to the potash in the salt, is shown by the fact that manganate of soda and binoxide of manganese are equally efficacious in the treatment of amenorrhœa. The manganate of soda was given in two-grain pills, two four times a day; and the binoxide in four-grain pills, one four times a day. It may be thought that the manganese acts by improving the condition of the blood, but this is not the case. The treatment succeeds equally well in the plethoric and in the anæmic. Given in cases of chlorosis, the permanganate not infrequently brings on the period without in any way improving the anæmia."—*Lancet*.

Concentrated solutions of saline cathartics are recommended by Dr. Matthew Hay in the treatment of dropsy (London *Lancet*). He has succeeded in demonstrating, from experiments on man and dogs, that saline solutions, given in a concentrated form when the alimentary canal contains little or no fluid, produce an almost immediate and very decided concentration of the blood, by depriving it of a large amount of its water through the intestinal secretion which the salt excites. This concentration of the blood reaches its maximum in about half an hour, and is so marked that he found in the case of a man, to whom he gave three-fourths of an ounce of sulphate of soda in three ounces of water, that the number of blood-corpuscles in each cubic millimetre of his blood rose from about 5,000,000 to 6,790,000. This degree of concentration does not last long, but in from one to one and a half hours begins to decline, and at the end of about four hours is reduced to normal. This reduction is effected by the abstraction of lymph and other fluids from the tissues, but the alternations in the volume of the blood seem to have no effect on the blood-pressure. A second concentration takes place some hours after, owing to the diuretic effect of the absorbed salt. Based on these considerations, he made several trials of the concentrated salt in cases of dropsy, with very satisfactory results in most of them. He says, that he has found it more useful in general dropsies than in local ones, and of the general dropsies most beneficial in those dependent upon a stasis of the circulation, as cardiac dropsy. He particularly recommends the sulphate of magnesia as the most suitable saline cathartic for this purpose, owing to its ready solubility, being soluble in less than its own weight of water.—*Chicago Weekly Med. Review*.

For a day or two antecedent to the actual commencement of the catamenial flux (Virginia *Medical Monthly*) women not unfrequently suffer acute pain in the pelvic region, doubtless due to hyperæmia and hyperæsthesia of the reproductive belongings. To obviate this I have found no treatment give such satisfactory results as the following: ℞ Codeiæ Sulphatis, gr. j.; Chloral Hydratis, Ammonii Bromidi, aa grs. xx; Aquæ Camphoræ, ℥ j. M. Sig.—For one dose. Take at bedtime. A repetition of the dose at that period is rarely necessary. In some cases a warm sitzbath of fifteen minutes duration before retiring is a valuable adjuvant.

REMOVAL OF WARTS AND CORNS.

Warts and corns are so frequently a source of discomfort or pain to those unfortunate enough to possess them that any remedy which promises to remove them, short of the knife, caustic, or actual cautery will doubtless be warmly welcomed by the profession. At the last meeting of the American Dermatological Association (*Med. Chronicle*, October, 1882), Dr. Jas. C. White gave an account of a very successful experience with the following remedy:

℞	Acidi salicylic	℥ ss.
	Ext. cannibis	grs. x.
	Collodii	℥ i M.

This is painted on the corn or wart in successive coats at short intervals until three or four lay-

ers are applied. The next day the growth can be easily scraped off. The reporter has tried this in several cases of corns with good effect. Care should be taken not to make the application to the sound skin, as it sometimes causes an unpleasant degree of irritation.

Unna (*Monatshefte f. Prakt. Dermotologie*, May, 1882) speaks highly of the value of the application of an *arseniated mercurial plaster* in destroying warts. This is applied continuously, and, in a few days, the growths became flattened yellowish white in color, and in the course of a week or two disappear entirely. No sloughing of the warts takes place, but they undergo gradual absorption. The application used by Unna contains from five to ten per cent. of arsenic. The combination may be made as follows:

℞ Acidi arseniosi . . . . grs. xii—xxiv
Ungt. hydrargyri . . . . . ʒ ss.
ft. Ungt.

This is to be spread on muslin or adhesive Plaster and applied to the parts containing the warts It should be kept applied constantly, or at least all night. It would be well, however, in using this to guard against absorption of mercury.—*Medical Chronicle.*

Medicated Gelatine in local treatment of skin diseases is highly spoken of by Prof. Pick, of Prague (*Wein. Med. Zeit*). The gelatine is dissolved in double its weight of distilled water, in a bath, and the desired medicine stirred in. This is cooled in any convenient shape. The patient is instructed to melt a piece of this in a saucer set in hot water and apply with a brush to the dis eased surface. After this is dry it should be occasionally painted with a thin coat of glycerine which prevents its getting so dry and peeling off, and also makes it flexible, so that motion at the joints is not prevented. It is a most clean and convenient dressing, and should come rapidly into favor. It is easily removed in the warm bath.—*Chicago Weekly Med. Review.*

SPECIAL REMEDIES OF VALUE IN INEBRIETY.

Our object is to call attention to some of the remedies that are being used in the treatment of inebriety, and indicate their general value, from the experience of to-day. We would not have the reader infer that these are the only therapeutic agents of use in the treatment of inebriety, or that we call attention to them simply as advertisers in this journal.

Most of these remedies have been tested clinically from samples sent direct from the manufacturer, and while we have not yet completed the clinical observations of these drugs, enough has been ascertained to fully sustain the following endorsements. *Coca* and *Jamaica Dogwood*, prepared by Park, Davis & Co., of Detroit, either used in combination, or separately, have often a marked action as a nerve tonic and sedative. The *coca* has been given as a tonic in cases of great debility, and so far seems of greater value than quinine. The dogwood is in some instances a very pleasant narcotic, and is always worth a trial. The *Vitalized Phosphates* of F. Crosby, New York, have in our hands proved to be of much value in cases suffering from great debility and acute dyspepsia.

Lactopeptine is another remedy that has a peculiar value in inebriety where nutritive disturbances are present. *Fellows' Hypophosphites* may be placed in the same list, as a remedy that should be tried in all these cases of chronic inebriety, where conditions of profound neuræsthenia are associated with this disease. *Horsford's Acid Phosphate* should be used in every case of inebriety, and as a general tonic and nerve sedative it seems unequaled, but should be given many weeks after the alcohol is withdrawn. *Avena Sativa*, by Keith & Co. of New York, is a remedy about which much difference of opinion exists. From a limited observation it is evidently a medicine of some value, and has been used with success to combat the peculiar exhaustion from opium and alcoholic inebriety. The value of *Bromida*, prepared by Battle & Co. of St. Louis, is so well attested that it needs no comment.

The Horsford Acid Phosphate, the Hypophosphites of Fellows' and the Vitalized Phosphates of Crosby, have each a personal value in all cases of inebriety, but we need further study to determine their use minutely. The other remedies have been found essential, and should always be included in the means used to treat inebriety.—*Quarterly Jour.*

AN IMPROVED METHOD OF CIRCUMCISION FOR CONGENITAL PHYMOSIS.

Dr. Neil McLeod recently operated on a child of two years, in whom the orifice of the prepuce scarcely admitted the point of a probe, but by dilating this orifice forcibly with "sinus forceps," and the addition of a few tiny snips with scissors round the margin of the orifice thus dilated, the foreskin could be drawn back until the point of the glans showed itself. Further retraction was prevented by the adhesions referred to, but these were easily broken down by means of a probe passed between the corona glandis which was exposed in its whole extent. The prepuce was next replaced forward, and the amount to be cut off was marked by a clip arrangement, made by tying two ordinary directors, groove to groove, at one end and slipping the prepuce into the clip formed by the untied ends. Three carbolized silk threads were then passed through the prepuce at equal intervals close to the clip on its proximal side, the glans being guarded as the needle was

passed, and each thread being of sufficient length to form two sutures. The prepuce in front of the clip was then cut close off the clip separated, the penis released, vessels twisted, the threads fished up with a blunt hook from the now enlarged preputial slit, cut, and then tied on each side. The orifice in the inner or mucous layer of the prepuce can then be slit with scissors down to the corona, but this is unnecessary if the clip is put on so that the line of section runs in the direction from the corona to the orifice of the urethra.

The surface of the glans being anointed with vaseline, a plug of absorbent cotton dipped in one to twenty solution of boroglyceride made an excellent dressing, and was kept applied by a bandage passed round the abdomen, knotted behind, and the two ends brought forward between the legs over a piece of light macintosh or oiled silk, the bandaged ends diverging so as to include the genitals, then converging and being looped through the bandage crossing the abdomen. The absorbent pad was changed every time that urine was passed. Healing took place by first intention, and not a trace of odor was detected from first to last. Carbolized catgut sutures would have been better than silk, as they do not need to be removed.—*Edinburgh Medical Journal.*

CHAMOMILE IN INFANTILE DIARRHŒA.

Dr. Christopher Elliott, physician to the British Hospital for Sick Children (*Practitioner, Dec.*, 1882), endorses Ringer's claim for the great value of infusion of chamomile in infantile diarrhœa connected with dentition, and in which the stools are many in number, green in color, or are slimy and streaked with blood, and accompanied by pain and cramp. He gave ʒss ʒj of the infusion to a child under one year, and double the quantity to a child over that age, giving it three times a day, or oftener, according to the severity of the attack. He explains the rationale of this treatment by the power which chamomile flowers possess of subduing reflex excitability, a power residing in the volatile oil contained in them. Grisan was unable to tetanize, by means of strychnia, a decapitated frog which had been fortified with a dose of chamomile oil, and *vice versa* when reflex excitability has been artificially produced by means of strychnia, it could be calmed again by chamomile oil.—*The Medical Summary.*

TREATMENT OF CONSUMPTION.

Dr. Robert Saundby, in the *Practitioner*, gives a very valuable *resume* of this subject. Cod-liver oil and quinine are Dr. Saundby's sheet anchors, the hypophosphites having disappointed his expectations. Good nourishment and attention to the digestive functions form the best treatment of cough. If a consumptive patient wants to take a short cut to the next world, he has only to take an opiate, paregoric for example. Codeia is most valuable. Camphor inhaled, a lump under the pillow, or some powder in a jug of boiling water, form an effectual anodyne. To prevent dryness of the mouth, a compressed tablet of chlorate of potash and borax in the cheek remains all night, and causes sufficient salivary secretion to keep the air-passages moist. The bronchitic attacks are to be met by the use of turpentine vapor and counter-irritation, and sulphur internally. Nothing controls the profuse secretion of the bronchial mucous membrane so readily as fifteen to twenty grains of sulphate of iron, given in pills or mixture during the day. The use of oro-nasal inhalers, charged with carbolic acid or eucalyptus oil, is strongly advocated. For anorexia, quinine does more than any other drug; while the peptones, Hoff's malt-extract, and such like preparations, are in many cases most valuable. Cod-liver oil, in doses of one teaspoonful, after meals, thrice a a day, Dr. Saundby believes to be quite sufficient, larger doses not being assimilated. The diarrhœa is always controlled by two drachms of dilute sulphuric acid to the pint of sugared orange-water, drank *ad libitum*, unless ulceration be present; and then starch and laudanum enemata, or an enema of half an ounce of liquid extract of ergot, will in most cases give relief. The sweating is generally controlled by the same means as are used for the diarrhœa; but if not, then atropine or picrotoxine must be used. Hæmoptysis Dr. Saundby treats with ergot internally or subcutaneously. In conclusion, a tabulated view is given of the different remedies. Specific: quinine, cod-liver oil; Cough: liquorice, camphor, codeia lozenges; Bronchitis: turpentine inhalations and epithens; Purulent expectoration: eucalyptus inhalation, sulphate of iron; Anorexia: quinine, peptonized food, malt extracts, cod-liver oil, ether alcohol. Diarrhœa: sulphuric acid, ergot, ergotine. —*London Med. Record.*

HÆMOPTYSIS.

Dr. Brown says: Of drugs, ergot seems to be the most powerful in checking hæmoptysis. The extractum ergotæ fluid may be given in doses of a teaspoonful every fifteen minutes, until the hemorrhage is stopped, and then continued in smaller doses, or it may be given by hypodermic injection, in doses of 15 drops, or ergotine may be used. If the stomach is irritable, ergotine may be given, per rectum. Sometimes ergot will have no appreciable effect. Under such circumstances I think that gallic acid is the next best remedy. I frequently combine it with aromatic sulphuric acid, which makes a more efficient and pleasant mixture:

℞. Acidi gallici, 2 drachms; acidi sulphurici aromat, 1 drachm; glycerinæ, 1 ounce; aquæ, q. s. ut. ft., 6 ounces. M. Sig. A tablespoonful, as required.

This is to be given every hour, every half-ho u or at shorter intervals, until the hemorrhage is brought under control. This, I think, ranks next to ergot, and where the stomach refuses ergot, or where ergot produces no effect, I usually resort to this combination.—*Med. Brief.*

DEATHS DURING THE ADMINISTRATION OF ANÆSTHETICS.

In a paper entitled " Remarks on the Death-rate of Anæsthesia, with an account of six fatal cases," Mr. W. Roger Williams, F.R.C.S., remarks, in conclusion, " I have observed that those who administer anæsthetics too often do so without any fixed principles to guide them. This is regretable, because, as many of these cases show, the fundamental laws of the anæsthetic art cannot be disregarded without entailing a deplorable sacrifice of life. I will here endeavor to state, in the briefest manner possible, the most important practical inferences from them. With regard to chloroform, then, subject to the attainment of the object in view too much air cannot be given during its administration; and, with regard to ether, too little air cannot be given during its administration. From this, it follows that a long time is required to induce anæsthesia by chloroform; but to produce the same result with ether, a short time is sufficient. Now by a long time, I mean about a quarter of an hour, and by a short time, about five minutes. Surgeons are not unfrequently to blame in this respect. How often one has heard it said to the chloroformist—' be as quick as you can, I want to commence the operation in five minutes.' In my opinion, this is equivalent to saying—' Kill at least 1 per cent. of my patients.' Those kind of inhalers are the best which most facilitate the fulfilment of these requirements. For giving chloroform, one with a wire framework, having a diaphragm of flan nel, or some similar material stretched over the top of it, on which to evaporate the anæsthetic, but open at the sides, would be very good; but a piece of lint, or the corner of a towel, properly used, would do as well. A graduated drop bottle is necessary in any case, as only a small quantity of chloroform should be poured on at a time, which requires to be frequently renewed. For the administration of ether, Ormsby's inhaler seems to me to be the best; it was designed to fulfil the requirements just mentioned, and I have found it answer admirably. There is only one other point I will now mention, and that is the importance of watching the respirations during the process. To do so properly, of course the epigastrium must be uncovered. It is of much greater value than feeling the pulse, since, when the latter stops, there is, as a rule, an end of the patient. Mr. Lister has very ably insisted on this. However, I have found it generally neglected at King's College.—*British Medical Journal.*

BRUNELLI PROCESS OF EMBALMING.

The process of embalming is as follows, and is called the " Brunelli process:" 1. The circulatory system is cleansed by washing with cold water til it issues quite clear from the body. This may occupy from two to five hours. 2. Alcohol is injected, so as to abstract as much water as possible. This occupies about a quarter of an hour. 3. Ether is then injected to abstract the fatty matter. This occupies from two to ten hours. 4. A strong solution of tannin is then injected. This occupies for imbibition two to ten hours. 5. The body is then dried in a current of warm air passed over heated chloride of calcium. This may occupy two to five hours. The body is then perfectly preserved, and resists decay. The Italians exhibit specimens which are as hard as stone, retain the shape perfectly, and are equal to the best wax models. It will be observed in this process that those substances most prone to decay are removed, and the remaining portions are converted by the tannin into a substance resembling leather.

A NEW TREATMENT OF DYSENTERY.

Dr. F. Rawle recommends the following treatment in the *Brit. Med. Jour.*, January 27, 1883:

First, having placed the patient between warm blankets, I proceed to inject a pint and a half of warm water, at a temperature of 90° Fahr. This is seldom retained longer than a few minutes, but is pronounced very grateful to the patient. When the water has soothed the mucous membrane of the colon and rectum, and brought away any *effete* matter, I then proceed to administer a small injection of two ounces, by measure, with a gum-elastic bottle. The form I administer is the following:

℞.	Quiniæ disulphat.,	gr. x.
	Tinct. camphoræ comp.,	ʒ iv.
	Decoctum amyli ad	℥ ij.

M., and when about milk-warm, inject.

It is generally retained, but if ejected, it may be repeated after an hour or two. This I have found of great service, and very grateful to the patient. I do not stop to inquire how it acts, but the effect is like magic. If griping pains be felt over the region of the epigastrium, I administer half-drachm doses of chlorodyne, in some aromatic water, mint, caraway, or aniseed. The diet, of course, should be of the most soothing kind: jellies, isinglass, linseed, toast and barley water, *ad libitum.* Ipecacuanha I have found of little service, and have discarded it from my treatment. If any of my medical brethren will try these measures, he will not often be disappointed. I have used with advantage warm turpentine stupes on warm flannels, over the hypogastrium.

ON PREVENTION OF LACERATION OF THE FEMALE PERINÆUM.

Mr. Alexander Duke, M.K.Q.C.P.I., Obstetric Physician to Dr. Steveens' Hospital, Dublin, remarks, "The best preventive treatment of laceration that I have found (and which I dare not claim as original, though I find no notice of it in the text-books on midwifery) is this :—When I find the head fairly engaged in the pelvis, and advancing with each pain, I take my seat by the patient's bedside, and having lubricated my left thumb, or the two first fingers of my right hand, I introduce either into the vagina, and at the onset of a pain draw back the perinæum firmly, but gently, towards the coccyx, relaxing the tension gradually as the pain lessens till the next ensues, and so on, till I can draw back the perinæum with very slight effort. I thus tire out the muscular structure, and produce sufficient relaxation for the head to pass.

"In most cases so treated there is no danger of the perinæum, but when the pubic arch is narrow (which can be easily determined) I take the additional precaution of raising the patient's left hip, and supporting it on a hard pillow, while the shoulders are kept low, fomenting the parts, using inunction of lard or vaseline, and taking particular care to direct the head forward by pressure, with my left hand below the coccyx or a finger in the rectum, leaving the perinæum untouched. It has always seemed anomalous to me that the perinæum should be expected to dilate on such short notice, namely, "the process of extension," while dilatation of the os and cervix occupy such a considerable time, even with the additional help of nature's hydrostatic dilator, viz., the bag of waters.

"The drawing back of the perinæum produces no additional pain to the patient, as it is done during a uterine contraction, and I feel sure that if nurses and students were educated as to the proper way of preparing the perinæum previous to its distension with the presenting part, we should see and hear less of lacerated perinæum."—*British Medical Journal.*

In a Recent Editorial concerning Smartweed as an emenagogue, in the *Medical News* it is stated that the drug (whose botanical name is polygonum hydropiperoides) is indicated in states of anæmia, functional torpor of the ovaries and uterus due to systematic depression, and is contra-indicated in the condition of plethora. Its power to stimulate the uterine circulation renders it useful in menorrhagia, and in metrorrhagia due to relaxation of the uterine vessels. Subinvolution of the passive kind with a sluggish circulation, cold hands and feet, and general depression, are also benefited by this remedy. The best form for administration is the fluid extract in five to thirty minim doses, mixed with glycerine and wine, three or four times a day.

ANTISEPTIC INHALATION IN PHTHISIS.

Dr. J. G. Sinclair Coghill of the National Hospital for Consumption gives the following formula for an inhalation in phthisis :

℞. Tr. iodi, ether, acidi carbolici, aa ℥ ij ; creosoti (or thymol), ℥ j ; alcoholis, ad, ℥ j. M.

This may be inhaled through cotton wool on which it has been dropped.—*Mich. Med. News.*

TO DEODORIZE IODOFORM.

Dr. Q. C. Smith, of Austin, Texas, recommends the following (*Southern Practictioner*): ℞ Iodoform, fine powdered, ʒ j ; Tannic acid, ʒ ss ; Balsam Peru, Oil Sassafras, Oil roses, Oil camphor, aa gtt. ij. Mix thoroughly. We have used this formula for several months, and find it much the best of the many we have tried.

SALICIN AND RHEUMATIC ENDOCARDITIS.

In a paper by Dr. T. J. Maclagan on "Rheumatic Endocarditis," the author remarks, in conclusion :—"Salicin is the preparation to which I give preference, not because I regard it as superior to salicylate of soda as an antirheumatic, but because it may be given in large and frequent doses without causing such disturbance of the system as not unfrequently follows the use of the salicylate, and necessitates its suspension. My experience, too, is that those treated by salicin (which is a bitter tonic) convalesce more rapidly than those treated by the salicylate. There is an impression abroad that it is very expensive. It is not so. Two of the chief English manufacturers of it have told me that they are prepared to supply it to hospitals and dispensaries at 10s. 6d. a pound. Convalescence is so much more rapid under its use, that I am not sure that it would not in the long run prove cheaper than salicylate of soda. But, whichever is employed, let it be given in large and frequent doses. I make this appeal in the interest of the heart as well as of the joints. Let every case of acute rheumatism be regarded and treated as one in which heart complications may possibly be prevented, and it is probable that in some cases they will be prevented. But every hour is of importance, for it needs no argument to show that the danger to the heart is less in a case in which the course of the disease is arrested within twenty-four hours than it is in one in which three or four days are expended in the process. The fact has never been accepted by the profession that the course of acute rheumatism may in many cases be arrested within twenty-four hours of the time that treatment commences. The recognition of that fact is the keystone to all possible success in the prevention of cardiac complications."—*British Medical Journal.*

TREATMENT OF GONORRHŒA.

A rather large number of American, German, French, and English physicians have—as we see by reading through the many different foreign and domestic medical journals—of late been reporting very successful results in the treatment of gonorrhœa by the *yellow* oleum santali. We learn that the remedy invariably puts an end to the discharge within two days, but to prevent a relapse it has to be continued for two weeks longer. From 15 to 20 drops given three times daily is the usual dose, which may be administered on sugar or in gelatine capsules.

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In Ulcer of the Stomach and in chronic gastritis M. Broca advises (*Practitioner*) that the stomach should be washed out systematically, and that the patient should be fed artificially. In washing out the organ there are two indications to fulfil—one, to empty it of whatever it may contain, and the other to treat the diseased membrane with medicated solutions. He recommends the syphon tube, for the reason that it is so easy to manipulate that the patient can soon learn to wash out his stomach himself. After the washing, the patient is to be fed through the tube before it is withdrawn with powdered meat, raw eggs or broth. He thinks great advantage is to be derived from overfeeding the patient, and states six hundred grammes of raw meat, one dozen eggs, and three litres of milk as a daily allowance, which may be easily exceeded. The increase in the amount of food should be gradual, a small quantity being given at first, until it is shown that milk and eggs are easily digested. If pain should come on several hours after eating, the stomach should be emptied with the tube. There is a permanent cure if the patients take proper care of themselves afterwards. He thinks this plan of treatment might be pursued with advantage in other than gastric disorders, as for instance in advanced phthisis.

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CURE OF SQUINT WITHOUT OPERATION.

In the early stages of convergent strabismus, before the internal rectus muscle is permanently contracted, Dr. Boucheron (*Schmidt's Jahrbacher*, January 17, 1883) claims that a cure is possible without operation. He states that as convergence is caused by efforts of accommodation for near objects, if we take away the power of accommodation squint will not occur. He maintains a constant mydriasis by the instillation of atropine night and morning. A cure is usually obtained in two or three weeks. If atropine is not well borne, other mydriatics, such as duboisia, may be used. In nine cases of intermittent strabismus the author obtained eight cures by this method.—*The Medical Record.*

TREATMENT OF ULCERS WITH LARGE AND SLOWLY SEPARATING CENTRAL SLOUGHS.

By B. A. Whitelegge, M.D., Resident Medical Officer.

The following is, as far as I am aware, a new method of treating these ulcers, although possibly the same idea may have occurred to others as well as to myself. In these ulcers the slough frequently remains, as a hard, white mass, very slow and tedious in separating from the subjacent tissue. There being no possibility of healing whilst this mass remains, its rapid removal becomes a matter of some importance. Finding that the ordinary methods of treatment were slow in effecting separation of the slough, I was led to try the effect of pepsine as a dressing. I have now used it in some half-dozen cases, and with the most satisfactory results. Within a week it dissolves the slough, and leaves a granulating surface, very amenable to further treatment. My method of using it is to apply a lotion to the ulcer containing pepsine wine, mixed in varying strengths, but usually about half pepsine and half water, with a little tr. of lavender to improve its appearance.—*Medical Press.*

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A NOVEL AGENT IN THE RADICAL CURE OF HYDROCELE.

J. E. W. Walker, M.R.C.S.E., L.S.A., late H.M. 55th Regt., writes:—"In bringing this matter before the profession, I feel bound to admit that, but for a curious accidental circumstance, the agent might never have presented itself to my notice. In the year 1875, I proposed to operate upon a patient, aged 65, for the radical cure of hydrocele of the tunica vaginalis. The disease had existed for about ten years, and had been repeatedly emptied by other surgeons. At this time I removed, by the trocar and cannula, about twelve ounces of serum, and by accident, took from my pocket a bottle containing about two drachms of liquor ergotæ (Battey) in the place of the same quantity of tincture of iodine, which it was my intention to throw into the cavity. On my return home, I discovered the mistake, and watched the patient for some hours at intervals. No inflammatory state occurred, and there was entire absence of pain, so that I allowed my patient to return to his ordinary occupation the next morning. To the present time there has been no return of the abnormal secretion. I have since, on two occasions, used the same plan with perfect success, and I attribute the cure to a specific action, exerted by ergot which re-establishes the balance between secretion and absorption."—*British Medical Journal.*

OPHTHALMIC APHORISMS.

Dr. J. J. Chisholm, of Baltimore, gives the following valuable aphorisms in a report presented to the Maryland State Medical Society at its last session:

1st.—*Do not blister.* In forty-nine applications out of fifty, as I find it used by physicians at large, it is an additional and useless torture to the eye disease from which the patient is already suffering.

2nd.—*Do not use nitrate of silver.* As constantly prescribed by general practitioners, it is not beneficial in one case out of one hundred, and therefore is a very painful infliction to the ninety-nine who would have been so very much better off without it.

3rd.—*Do not prescribe sugar of lead.* In every case zinc, tannin or alum is better, and then there is no fear of having insoluble deposits incorporating themselves with the exposed surface of corneal ulcers.

4th.— *Always use weak solutions of the mineral and vegetable astringents* in the treatment of eye inflammations which attack the mucous surfaces, and restrict their application to conjunctival diseases exclusively. One grain of alum, sulphate or chloride of zinc, sulphate of copper or nitrate of silver, in an ounce of water, will in the majority of cases of conjunctival diseases, do much more good and give much less uneasiness than the very painful five and ten grain solutions which are so often injuriously prescribed by physicians.

5th.—*Solution of the sulphate of atropia*, from one to four grains to the ounce of rose water, is an essential eye-drop in the treatment of acute iritis, to break up newly formed adhesions. One drop of the atropia solution in an inflamed eye is a most valuable means of establishing the diagnosis whether iritic complications exist or not, and should be used in most cases of eye inflammation to find out whether there are any adhesions of the pupil to the lens.

6th.—*Eserine in solution of one grain to the ounce of water* is the remedy for purely corneal lesions.

7th. When physicians are in doubt as to the character of an eye disease, they should seek a consultation from specialists who are more familiar with eye diseases than general practitioners can possibly be. Such timely aid often saves the patient a lifetime of trouble.

If physicians would commit to memory and keep at their finger ends, and ready for use, these simple aphorisms, the amount of mental and bodily suffering which they will prevent in their eye patients is beyond calculation. While all good rules have necessarily many exceptions, they may safely follow their simple guidance.—*Ohio Medical Journal.*

THE CANADA MEDICAL RECORD,

A Monthly Journal of Medicine and Surgery.

EDITORS:

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SUBSCRIPTION TWO DOLLARS PER ANNUM.

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All communications and Exchanges must be addressed to the Editors, Drawer 356, Post Office, Montreal.

MONTREAL, MAY, 1883.

THE NEW ANATOMICAL ACT.

The Lieut-Governor of the Province of Quebec, under date of May 19, has issued his proclamation, stating that for the purposes of the New Anatomical Act the Province shall be divided into the Quebec section and the Montreal section The former comprises the judicial districts of Arthabaska, Beauce, Chicoutimi, Gaspé, Kamouraska, Montmagny, Quebec, Rimouski, Saguenay and Three Rivers. The Montreal section includes Beauharnois, Bedford, Iberville, Joliette, Montreal, Ottawa, Richelieu, St. Francis, St. Hyacinthe and Terrebonne.

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THE MONTREAL GENERAL HOSPITAL.

On the 17th of this month the annual meeting of the Life Governors of this Hospital was held in the Governors Hall. As the election to fill the vacancy created by Dr. Wright's resignation took place at this meeting the attendance was very large, in fact the largest ever known. The candidates were Dr. Shepherd and Dr. F. W. Campbell, and on the final ballot Dr. Shepherd had a majority of 12 votes, viz., 75 votes, and Dr. Campbell 63 votes. Personally interested in the contest we would that we felt our task was completed by a bare statement of the result. But it is not, and we feel compelled to say that a large amount of dissatisfaction exists among the Governors at the manner in which the election was conducted. There is a very general belief that the meeting was opened at least five minutes before the time named, instead of allowing the

usual five minutes for differences in watches. This belief we emphatically endorse. By five minutes past three the election of the lay officers and of the old Indoor Staff of Physicians was completed, and balloting for Dr. Wright's vacancy begun. By ten minutes past three the ballots were announced as all collected, whereupon the President declared the ballot closed. After the closing of the ballot a gentleman only just arrived, insisted on his ballot being received, and, after a few minutes' discussion, it was decided to re-open it for five minutes, new votes to be initialed by the President. We have been thus particular with a view of showing that to say the least no time was lost in bringing the contest to an issue. This celerity has not been usual, and many who on the occasion of former elections were delayed for some time, trusting to a similar delay, arrived too late to deposit their vote. We are of opinion also that, once the ballot was closed, it was not right—perhaps not legal—to re-open it, and in consenting to it the worthy President erred. This re-opening may have cost Dr. Campbell his election, for we have good reason to know that when the ballot first closed the candidates tied, and the chairman would therefore have been called upon for the casting vote. Dr. Campbell's friends have as good a right as the other side to anticipate that he would have received it. It may be argued that the arrival of several gentlemen after the ballot was re-opened who voted for Dr. Shepherd proves that that gentleman had the majority in his favor. But against this is the fact that by the time the President gave the result more than sufficient of Dr. Campbell's friends had arrived to reverse the position of things. If the ballot had not been re-opened, their only grievance would have been the unusual rapid termination of the election, while now they feel that they had quite as strong a ground to ask for its re-opening as existed when the meeting consented to its being done. The lesson which all the facts that we have narrated teaches is that in future elections the ballot must be kept open for a specified time, which time shall be known to the Governors before the meeting. Analysing the vote cast upon the present occasion, it is believed, in fact admitted, that the majority of twelve was secured by the twelve Medical Governors connected with McGill Medical Faculty, who were at the meeting casting a solid vote against Dr. Campbell. Such of course was expected by those acquainted with the history of the Hospital, but it certainly opens the eyes of the Governors to the fact that, so far as these gentlemen are concerned, they are determined that McGill College shall alone be represented on its Medical Staff. It has been a hard task to convince the Governors of this fact, but convinced they are now, and we are satisfied that they are determined it shall not be permitted to continue. We are quite willing that they shall have an equal representation, but we do not think it either for the interest of the Hospital, or for the city as a seat of Medical education, that they should have a monopoly of the appointments on the indoor staff of the Montreal General Hospital. How this equal representation is to be brought about will, we believe, be brought before the Governors at an early date.

DR. W. E. SCOTT.

Once more the hand of death has appeared among the profession in Montreal, and removed a prominent member. Few who two months ago saw the apparently strong and manly form of the late Dr. Scott busily engaged in the practice of his profession, would have thought it possible that death was so near. Truly in his case, to his friends at all events, the announcement of his serious illness was most unexpected, and they hoped almost against hope that his vigorous constitution might, for a time at all events, enable him to resist the inroad of the renal and cardiac trouble from which he suffered. But they were mistaken, and on Thursday, May 24th, he breathed his last. Dr. Scott was born in London, Eng., in 1823, and came to this country in 1831. He studied medicine as a pupil of the late Drs. Holmes and MacCulloch, and in 1844 took the degree of M.D. at McGill College. Previously he had practiced as a Provincial Licentiate, and was House Surgeon to the Montreal General Hospital from 1841 to 1843. In 1845 he became connected with the Medical Faculty of his Alma Mater as Demonstrator of Anatomy, and in 1851 was named Lecturer on Forensic Medicine. In 1853 he became Professor of Clinical Surgery. On the retirement from the Faculty in 1856 of Dr. O. T. Bruneau, Dr. Scott became Professor of Anatomy, which chair he held at the time of his death, being then the senior member of the Faculty. For many years he was one of the Attending Physicians to the Montreal General Hospital,

which position he resigned some four years ago, being then elected one of the Consulting Staff. He enjoyed a very considerable family practice, and among his patients and acquaintances his genial manner made him many warm friends. He also occupied many positions of trust, principal among which was that of Consulting Surgeon to the Grand Trunk Railway.

MEDICAL FACULTY OF BISHOP'S COLLEGE.

Dr. Wilkins has resigned the chair of Physiology which he has held since 1880, and accepted a position on the Medical Faculty of McGill.

Dr. Armstrong has been transferred from the chair of Anatomy to that of Physiology.

Dr. J. Leslie Foley, lately Assistant Demonstrator of Anatomy, has been appointed Professor of Anatomy.

Dr. C. A. Wood has resigned the Professorship of Chemistry, and assumed the chair of Pathology.

Dr. Wm. Young has been appointed Professor of Chemistry.

Dr. Herbert L. Reddy has been appointed Professor of Therapeutics.

Dr. J. B. McConnell has been transferred from the Chair of Botany to that of Materia Medica.

Dr. E. H. Trenholme, who a few years ago retired from the Faculty, re-enters it as Professor of Gynecology. No one in the Dominion, perhaps, is better qualified to fill such a chair, and as he has become connected with the Women's Department of the Western Hospital, this chair promises to become one of great importance in connection with this school.

Dr. Kennedy retains Midwifery, and adds to it Diseases of Children, on which a complete course of lectures will now be given.

Dr. A. Lapthorn Smith, lately Demonstrator of Anatomy, has been appointed Professor of Botany.

Dr. Gaherty has been named Demonstrator of Anatomy.

Dr. F. W. Campbell, acting as Dean since Dr. David's death,has been unanamiously elected Dean of the Faculty.

Three Professorships in the School, viz., Chemistry, Anatomy, Pathology, as well as the Demonstratership of Anatomy, are now held by its own graduates. The Thirteenth session opens on the 2nd of October next, when we believe a good class is anticipated.

McGILL FACULTY OF MEDICINE.

The following further changes have taken place in this Faculty:—Dr. George Wilkins, "M.D., Toronto University," has been appointed Professor of Medical Jurisprudence. Dr. Shepherd becomes Professor of Anatomy *vice* Dr. Scott, deceased. Dr. MacDonnell, Assistant Demonstrator of Anatomy, becomes the Demonstrator. Dr. W. R. Sutherland, lately appointed Junior Assistant Demonstrator, becomes Senior Assistant, while Dr. Robt. Jared B. Howard, now in Europe, son of the Dean, has been named Junior Assistant Demonstrator.

MONTREAL HOMŒOPATHIC ASSOCIATION.

The above Association, constituted by Act of Parliament in 1865, obtained an amendment during the last session of the Quebec Legislature, and at a special meeting held early in May, it was resolved to establish a college, and a faculty was elected as follows:—Dr. Wanless, President, Theory and Practice of Medicine and Clinical Medicine; Dr. Muller, Registrar, Obstetrics and Diseases of Women and Children; Dr. Nichol, Materia Medica and Medical Jurisprudence; Dr. McLaren, Physiology and Institutes of Medicine; Dr. Fulton, Surgery and Clinical Surgery.

It was also decided to reorganize a free dispensary for the poor.

MONTREAL GENERAL HOSPITAL.

Dr. Wm. Wright has been elected to the Consulting Staff.

Dr. Shepherd has been elected an Attending Surgeon, *vice* Dr. Wright promoted.

Dr. R. L. MacDonnell, has been elected to the Out-door Department in place of Dr. Shepherd.

UNCERTIFIED CLINICAL THERMOMETERS.

A good clinical thermometer is as indispensable to the careful practitioner of Medicine as a good stethoscope; but to ensure accuracy of observation every one should make sure that his thermometer is reliable. Such serious discrepancies have been detected in uncertified thermometers, that, where accuracy is required, uncertified instruments are utterly useless. In a recent number of the *British Medical Journal*, Dr. Robertson, re-

sident Medical Officer of the Ventnor National Hospital for Consumption, records his experience of a dozen new clinical thermometers as follows: The Kew standard being 105.2°

No. 1	registered	94°
" 2	"	97.4°
" 3	"	99.8°
" 4	"	99.9°
" 5	"	100.8°
" 6	"	105.1°
" 7	"	105.2°
" 8	"	105.3°
" 9	"	105.5°
" 10	"	105.9°
" 11	"	106.2°
" 12	"	108.5°

The difference between the readings of No. 1 and No. 12 was 14.5°. While such errors are possible, reports of unusual thermometric readings can have but little scientific value, unless it be expressly stated that a certified instrument was employed.

UNITED STATES DISPENSATORY.

During the present month the fifteenth edition of the United States Dispensatory will be completed. The editors are Dr. H. C. Wood, Prof. J. P. Remington, and Prof. S. P. Sadtler. The revision has occupied about three years, and embodies the most recent discoveries in materia medica, pharmacy, chemistry and therapeutics. This is a revival of an old and famous medical work. The relation of the work to the United States Pharmacopœia will be maintained, but the Dispensatory will be encyclopedic in character, and will contain in addition to the list, official drugs and preparations, not only those being out of date, but a careful consideration of the most recent non-official drugs. The work is published by J. P. Lippencott & Co.

The London *Medical Press*, in referring to a serious falling off in the revenue from intoxicating drinks, states that since October, 1880, one million people in England have put on the blue ribbon, and 564,000 have signed the pledge.

The *Lancet* condemns the new article of female attire called the "crinolette." It is an impediment to walking, induces an uneven bodily temperature, adds another to the many burdens borne by the waist, and bids fair to compete with crinoline in encouraging a prevalence of deaths from fire.

BEEF PEPTONOIDS.

This preparation, now being brought to the attention of the Medical Profession in Canada, deserves more than a passing notice at our hands, as its importance as a food, in all cases of convalescence where a concentrated form of nourishment is required in an easily assimilated condition, cannot be overestimated. In a communication to the *Medical Record*, New York, July 15th, 1882, the results of its use, both when administered per anum as well as per rectum, are clearly set forth in the history given of several cases, in which the writer (Dr. Bliss) employed it with the utmost satisfaction. One of these cases being that of the late President Garfield, the results of its administration per rectum were closely watched by the attending Physicians, and there seems to be but one opinion among them, that for rectal feeding the profession have no preparation before them of anything like corresponding value.

"Beef Peptonoids" is a concentrated powdered extract of beef, *partially digested*, and combined with an equal portion of gluten, this latter substance being one of the most nutritious found in the vegetable kingdom, and closely allied to beef in nutritive value. In addition to its value as a nutrient Beef Peptonoids contains sufficient peptone to assist the digestion of any other food administered at the same time, which is a most important feature.

PERSONAL.

Dr. W. T. Duncan (M.D. McGill, 1882) and J. W. McLean (M.D. McGill, 1882), who for a year past have been resident Medical officers at the Montreal General Hospital, have left for the West, the former gentleman intending to locate somewhere in Dakota.

Dr. Henderson (M.D. McGill, 1881), and formerly House Surgeon of the Montreal General Hospital, and for the past year Secretary of the Medico-Chirurgical Society of Montreal, left, April 18th, for Calgarry, N.W.T., where he has taken up land, and intends to settle.

Dr. Burke (M.D. McGill, 1862,) superintendent of the London Insane Asylum, was in Montreal early in May, and was the guest of his former classmate, Dr. Trenholme.

THE CANADA MEDICAL RECORD.

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INTERSTITIAL OR TUBO-UTERINE GESTATION, WITH NOTES ON SIMILAR CASES IN THE MUSEUMS OF LONDON HOSPITALS.

(Communicated to the Canada MEDICAL RECORD).

BY ALBAN DORAN.

This preparation consists of a uterus and its appendages, showing a cavity on the right side of the fundus, which has ruptured and discharged a fœtus and its membranes into the abdominal cavity.

A brief history of the case was published in the "*British Medical Journal*," October 14th, 1882, by Mr. Carr Holstok Roberts, of Kilburn, who has presented the uterus to the museum of the Royal College of Surgeons. In that collection, which possesses a fine series of preparations illustrating tubal gestation, this specimen is, at present, unique.

The patient was a tall and stout married woman, aged 32. Her two only children had been born at the full period, the youngest was fourteen months old, and had been weaned about two months; she had neither menstruated during lactation, nor seen a period since the weaning of her last child. At 10.30 p.m. on October 1st, 1882, she was seized with severe abdominal pains when in bed. Her husband gave her brandy, but without any good effect; he then sent for Mr. Roberts, who found that her abdomen was neither swollen nor tender, although she complained of severe pain. The patient was also suffering from sickness and slight diarrhœa, caused, according to her belief, by some strong pills. The vomit consisted of half-digested food, and the motions were such as would be produced by a purgative. The patient's skin was cool and moist, her pulse good, and her respiration and temperature both normal. Sedatives, hot fomentations and linseed poultices to the abdomen were ordered, but at 8 a.m. on October 2nd, Mr. Roberts, when sent for, found her in a state of collapse; she remained perfectly conscious until 10.30 a.m., when she expired.

When the patient's body was examined after death no external marks of violence were found, the abdominal cavity was filled with nearly six pounds of clot, and five pints of a bloody fluid. Floating in this fluid was a fœtus, at about the second month of development, enveloped in its membranes. It measured one inch and a half in length. At the upper part of the uterus a rupture was detected, large enough to admit three fingers. The thoracic, and abdominal viscera were normal, excepting the heart, which was very flabby, and its chambers perfectly empty.

I have since dissected and prepared the uterus. The greater part of its posterior wall has been removed to show more perfectly the relations of the cyst. The uterus is five inches long, from the

fundus to the os externum, and appears very unsymmetrical, on account of the bulging of the cyst at its right upper corner. The walls are, posteriorly, from a fifth to a quarter of an inch thick, and the cavity is lined with a well-formed decidua.

The right side of the fundus is dilated, and rent asunder by a long ragged aperture, measuring two and a half inches when unstretched. The cavity thus exposed measures one inch and a half vertically, supposing the edges of the rent to be closed, and one inch antero-posteriorly. The walls are very thin along the line of laceration.

Anteriorly, the right round ligament springs from the outer aspect of the exposed cystic cavity which bulges freely, at its lower aspect, into the upper part of the interior of the uterus; at this part its walls are much thicker than above. The inner wall of the cyst, as we may term it, is very rough, resembling, to a certain extent, an auricular appendix. From some of its numerous pits or depressions hang broken-off tags of chorion, but there is not a trace of a distinct decidua.

The right Fallopian tube passes into the outer and anterior aspect of the walls of the cyst, expanding slightly into a funnel-shaped orifice, which opens into the cavity of the cyst, close to the rent in its walls. A stout bristle, introduced into the tube from without, passes readily into the cavity through the funnel-shaped orifice, which is lined with very smooth mucous membrane. On the outer surface of the portion of the cyst that projects into the uterine cavity is another funnel-shaped aperture with a smooth lining. A bristle has been passed from without, through this opening, into the cavity of the cyst without meeting with the slightest obstruction.* This sufficiently proves the tubal origin of the cyst, there being no evidence of rupture of the wall of the uterus out of the line of the tube, as it runs through uterine tissue into the uterine cavity. Still less is there any ground for believing in a partially bicornute condition of the uterus.

The right ovary measures $1\frac{1}{10}$th inch in length, it is flattened and four follicles are dilated to a maximum of $\frac{1}{12}$th inch diameter. It contains a true corpus luteum of triangular form, $\frac{3}{8}$ths of an inch in its widest measurement, lying far from the free border of the ovary towards the ilium, having ruptured on one side of the ovary. The left ovary is half an inch in its longest diameter, and contains no palpably dilated follicles, the left tube presents no abnormality.

The two sketches which accompany this paper are taken from drawings made by Mr. Sherwin. The first represents the relations of the cyst to the uterine cavity, the second shows the interior of the cyst and the rent in its walls. Before entering into general considerations, it will be advisable to compare this specimen with others that, existing in the metropolis, may be conveniently compared with Mr. Roberts' case by members of our Society.

I could find no specimens of interstitial or tubo-uterine pregnancy in the museums of St. Bartholomew's, St. George's, St. Mary's, Westminster, St. Thomas's, Middlesex, and Charing-Cross Hospitals, nor in the museum of King's College, or in the collection preserved at the Hospital for Women, Soho Square.

In the museums of three medical schools, only, do such specimens exist, and I have examined them all, in order to compare them with Mr. Roberts' case. The following brief notes may prove acceptable for convenience of reference.

Guy's Hospital, No. 2517^{85}.—"The ovum was imbedded in the left horn of the uterus. The cavity is about the size of a horse-chestnut and is quite closed. The uterus is much increased in size, the cavity is filled by an exuberant growth of deciduous membrane closing the Fallopian tubes." Death from rupture occurred at about the second month, the case is recorded in "Guy's Hospital Reports," series ii. vol. iii., p. 272. The cyst is of precisely the same character as in Mr. Roberts' case, but of not half the capacity. The Fallopian tube runs into its outer wall. No communication of the cavity with the interior of the uterus is indicated.

No. 2517^{90}. "At the fundus" of the uterus "is a large cyst, formed within its walls; in this the fœtus," which is over four inches in length, "was contained, at its upper part a rent was seen. The cavity is about three inches in diameter, and is situated in the uterine walls adjoining the left Fallopian tube." The uterus is lined with a decidua, as in the last specimen; a corpus luteum exists in the corresponding ovary; the case is recorded in "Guy's Hospital Reports," series iii., vol. vi. p. 275. This is a beautiful specimen, the cyst is clearly continuous with the tube, and bulges into the uterine cavity as in Mr. Roberts' case,

* This patulous condition of what represents the uterine orifice of the tube has been already observed in similar cases by Peppell, as quoted by Parry.

which, in degree of development, as indicated by the clinical history and the size of the cyst, lies midway between the two specimens in Guy's Hospital.

London Hospital.—The two examples in the museum of that institution are immortalised in the late Dr. Ramsbotham's 'Principles and Practice of Obstetric Medicine and Surgery.' Unfortunately, neither specimens show the relations of the tubes, uterus and cyst intelligible. In E*h* 24 "the bones of a fœtus, probably near full time, are seen lodged in a sac behind the uterus ; they are as clean as if macerated." "A portion of one of the long bones," says Dr. Ramsbotham, "protruded from the cyst into the cavity of the colon." The further account of the dissection, in that author's work, not quoted in the catalogue, leaves little doubt that the cyst which "occupied the right side of the uterine walls" is truly tubo-uterine. Had the cyst been in the free part of the tube, no matting together of the parts, by adhesions could have forced it into the uterine walls, but it is unfortunate that the relations of the right Fallopian tube cannot be seen. The specimen might, however, be an example of a hernial pouch in the uterus, such as Dr. Roper has described; to this question I shall presently return.

E*h* 105 is "a shrivelled fœtus of about four months which has escaped through a laceration in the uterine wall, in a case of parietal gestation." The cyst and uterus are included in the specimen. Dr. Ramsbotham most truly observes that the preparation does not display the peculiarities of the case well "having been taken from the body hurriedly and at great disadvantage." By the courtesy of Dr. F. C. Turner I have been enabled to examine this specimen very closely. The lower part of the cervix with the os externum has been cut away, the uterus has been laid open from the fundus to close above the cervix. The cyst has been completely severed from the uterus and sewn on to it by threads passed through their serous lining only. It has no aperture excepting the rent through which the fœtus escaped, but, on close scrutiny, the edges of the lower part of this aperture are found to be uterine tissue, cut artificially in dissection. Moreover, the tube and the ovarian ligament proceed from the outer aspect of the cyst, precisely as from a uterus; the ligament of the ovary never springs from a true tubal cyst in this manner. The whole aspect of the cyst, from outside, is like the uterus from which it has been severed, and its walls are of pure uterine tissue. Dr. Ramsbotham's description of the dissection leaves little doubt of the true nature of the specimen ; the cyst was "formed within the walls of the uterus," and "one tube was attached to the cyst." The same author figures Breschet's case which bears all the appearance of being tubo-uterine.

The museum of *University College* possesses one specimen (35-43) labelled "A case of extra-uterine fœtation in the substance of the uterus,* close to the end of the Fallopian tube. Rupture of the ovum at seventh week, hæmorrhage and death in twenty-four hours." The manuscript catalogue describes the specimen as having been taken from the body of a young woman, and the rupture of the cyst was clearly caused by violent exercise. This specimen is well prepared, the cyst is not half an inch in diameter, being smaller than in the specimen 2517^{65} at Guy's Hospital. There can be no doubt that the cyst is here a dilatation of the part of the tube that passes through the uterine walls, a bristle has been introduced through the tube into the uterus, and it traverses the cyst, concealed by the chorion which lines the inner aspect of that abnormal cavity. The uterus possesses a decidua.

Thus, including the preparation from Mr. Roberts' case there appear to be six examples of so-called interstitial fœtation mounted as pathological specimens in London museums. It is most significant that, in all the four where the condition of the affected parts has been intelligibly displayed, the tubal origin of the "interstitial cyst" is self evident.

These notes are intended to be strictly pathological, still they suggest certain obstetrical considerations. "Interstitial" or tubo-uterine pregnancy is a rare accident, as our London museums prove, for practitioners are never backward in presenting to such collections specimens of extra-uterine gestation, and the numerical richness of a series is facilitated by the fact that sudden death is so frequent an ending of this abnormality of gestation that a necropsy is generally allowed, or even enforced by a coroner. Hence we see a goodly

* Dr. Barnes would be thoroughly justified in the use of his term "ectopic gestation" in such a case as this, where the older term reads as an absurdity see 'Trans. Obst Soc.,' vol. xxiii., p. 94), but space prevents me from entering into questions of synonyms.

array of the more frequent tubal form in almost every museum; since 1877 I have dissected and mounted no less than four, for the museum of the Royal College of Surgeons alone. The records of our Society's 'Transactions' teem with cases of tubal gestation. Yet notwithstanding the publicity thus given to extra-uterine fœtation, only six specimens of the tubo-uterine form can be found in the metropolis. In Parry's standard work, 31 cases of this variety are included in a table of 500 cases of extra-uterine pregnancy; but in that table 230 cases are set down as "doubtful." This ambiguous series, however, must have been mostly made up of cases that were chiefly doubtful as to their originally tubal or "abdominal" character; cases of hopeless matting together of pelvic structures so common in all such disorders when of long standing; but interstitial fœtation is less likely to be overlooked and classified among these 230 doubtful cases.

In fact it seldom reaches the stage at which it becomes "doubtful" to a dissector. Interstitial pregnancy generally ends in a "fœtal cataclysm," as Dr. Barnes would say, at the second or third month, as in Mr. Roberts' case; hence there is no time for pelvic peritonitis, burying the ovaries in adhesions and contorting the tubes in every possible direction.

This tendency to early rupture of the cyst involves, of necessity, great difficulties in diagnosis, which is practically impossible during the first few weeks.* In these days of abdominal surgery a rescue of a case like that of Mr. Roberts, by a very experienced operator may yet be recorded; but the very circumstances under which this accident must occur will seldom bring the patient within timely reach of a surgeon who can manage complicated cases of ovarian and uterine tumours. A purely tubal cyst, even at this early stage, certainly bleeds less rapidly, moreover diagnosis is not so difficult; on the other hand the soft swelling on the right of the uterus in Mr. Roberts' case could hardly have been detected on palpation, although abdominal section would have revealed its true character. Then, amputation of the uterus above the cervix would have been the sole practicable course.

The tendency to early rupture is clearly due to the thinness of the cyst towards its upper or peritoneal aspect. The lower portion of its walls tend rather to grow thicker, and, supposing that the upper part does not rupture, pregnancy may continue till term. Rokitansky has described such a case, quoted in several works by contemporary writers. I can well understand how the fœtus might be born into the uterine cavity, after expulsion from the sac, and then directly, or after an interval, delivered from the uterus "into this breathing world" in the usual manner. Dr. Mundé describes a case* where he fully believes that such a phenomenon occurred; the patient recovered, so that the precise condition of the parts could never be ascertained.

The cases of suspected hernial embryo-bearing pouches of the uterus, well known to Fellows of the Society, may, in many instances, have been really tubo-uterine cysts, and there is every reason to believe that the former uterine orifice of the tube, in the part of the cyst that projects into the uterine cavity, might become dilated, from various causes, so as to admit a sound or even the forefinger. This orifice might dilate, in the delivery of the fœtus into the uterus, as the os externum dilates in natural labor, but it is more probable that it would be rapidly rent asunder. In the discussion on Dr. Barnes' paper on the so-called "Missed Labour," Mr. Spencer Wells and Dr. Gervis suggested the possibility of some missed labor cases being instances of tubo-uterine pregnancy.† But the cases quoted in support of this theory were theoretical, in so far as they all recovered, as did Dr. Mundé's patient; besides, the tubo-uterine nature of the pregnancy was based on the fact that the sound had been previously passed into an (apparently) empty uterus, without producing abortion; but this accident does not always follow the introduction of a sound into a normally gravid uterus. On the other hand, Dr. Roper's cases, mentioned by him in the same discussion, appear to have been verified by dissection; that obstetrician believes in hernial pouching of the gravid uterus through rupture of a part of its inner

* Dr. Gibbes, of South Carolina, distinguished a tumour in a case of tubo-uterine pregnancy, which he took for a fibro-myoma, and De la Faille correctly diagnosed a case from the intense pain caused by pressure on the uterus.—(See Parry, 'Extra-Uterine Pregnancy.')

* 'American Journ. Obstet.,' 1879, p. 330. The same remark applies to Dr. Lenox Hodge's case, just published in Parry's work.

† 'Trans. Obst. Soc. vol. xxiii., p. 100.

wall.† Should his cases have really been correctly interpreted in this fashion, I am inclined to rank among them the specimen *Eh* 24, in the London Hospital Museum. Still, I suspcet that some such cases were tubo-uterine cysts. When developed to a very great size their relation to the Fallopian tube might become confused and constitute a source of fallacy. As to pregnancy in one horn of a double uterus, it has so clearly nothing to do with the specimen I exhibit this evening, that it is unnecessary for me to discuss that subject.

The cause of the arrest of the ovum in the uterine part of the Fallopian tube is not, in Mr. Roberts' case, self-evident. The cavity bearing the fœtus appears to be a pure dilatation of the tube; as in most similar cases, there is no evidence that the muscular structure of the uterus itself has been ruptured; hence the unsatisfactory character of the term "interstitial." Such a rupture would if it could be proved by dissection, have occurred from some uncertain cause, before the arrest of the ovum, for a very young ovum could hardly burst the tube, whilst, were the tube ruptured in its uterine part already, we can understand how an ovum might be forced into the uterine tissue, in stead of into the uterine cavity. The uterine orifice of the tube, that is to say, in this case, the aperture in the lower part of the cyst, is quite patulous, and there are no traces of any polypi-obstructing it, as in cases related by Beck, Breslau, and Leopold.* Yet, although the uterine orifice of the tube was unobstructed at the date of the patient's death, it might very possibly have been obstructed by catarrhal swelling of the mucous membrane some eight weeks earlier, and this would have been sufficient to arrest the ovum. On the other hand, a dilatation or tortuous condition of the uterine part of the tube might have existed before conception, and if so, it is easy to understand how the ovum was arrested in it; Leopold discovered an abnormal and crooked condition of this part of a left tube, in a case where the corresponding portion of the right tube held a fœtus. I believe that the truth lies between these two explanations, but that the second is more probable than the first.

† Since this paper was read, a "Case of Intra-mural Pregnancy Resulting in Missed Labor" has been contributed to the "British Medical Journal" (November 18th, 1882), by Mr. C. E. Steel, of Liverpool. In this case "the Fallopian tubes were normal, and opened into the uterus separately from the sac." Thus there can be little doubt of the nature of the sac, which could not possibly have been tubo-uterine.

* "Zur Lehre von der Graviditas Interstitialis," 'Archiv. fur Gynæokogle,' vol. xiii. heft 3.

Society Proceedings.

Stated Meeting, April 27th, 1883.

THE PRESIDENT, R. A. KENNEDY, M.D., IN THE CHAIR.

Case for Localization.—Dr. Osler presented a patient with the following history: Francis ———, aged 41, married fifteen years. Not known to have had syphilis, though he lost one child shortly after birth with a skin eruption. Has enjoyed good health, with exception of present trouble. For six years he has had epileptic fits; at first at rare intervals—one in three months—but now one every fortnight. Liable to have them at any time if much excited. They are, his wife says, confined to the right side, towards which, also, he tends to fall. Not known whether they begin in hand or foot, as he has not had a fit since under observation; always loses consciousness. Nearly two years ago he began to have trouble in the right leg, jerkings and stiffness, which have steadily increased. The right arm was also weak, and for the past five months the speech has been affected. His memory is not so good as it was, and at times he is irascible. He has had two injuries to the head; the first when a lad of seven or eight, which has left a long scar on the right side, high on the parietal bone. There is no adhesion of the skin and no depression. The other was received by the fall of a scantling, seventeen years ago, and is a flat scar a little behind bregma on the left parietal bone. It is not depressed, and the skin not adherent. At present nutrition of muscles good; he walks with difficulty, owing to stiffness of right leg, in which the spastic gait is well marked. Reflexes greatly increased in the leg. Knee-tap somewhat exaggerated also in the left. Right arm does not appear much affected, but he says it feels weak. Grip is good; dynamometer shows it to be a little weaker than the left. Slight paralysis of lower facial muscles; tongue deviates strongly to the right, uvula drawn towards the left. Speaks with hesitancy, and is often at a loss for a word. No impairment of sensation. No optic neuritis or retinitis. The patient's head was shaved and Broca's lines drawn in order to define the exact position of the old injury on the left side. It is just behind the bregma, and would correspond on the cortex of the brain to hinder part of the superior frontal convolution. The symptoms point to a lesion of the

motor area on the left hemisphere, situated about the upper end of the fissure of Rolando, along the ascending frontal, and extending to the inferior frontal sinus. The character of the convulsive seizures, unilateral, the monocrural rigidity, the dissociation of the paresis, leg and face and gradual extension, point to a cortical lesion; but whether connected in any way with the old injury is somewhat doubtful. The question of trephining in such a case naturally suggests itself, and may come after further study of the case.

Dr. Roddick stated that he had known the patient for some time and he had suggested the advisability of trephining at the site of the old injury, but had been overruled by his colleagues.

Chyluria, not Parastic; Autopsy.—Dr. McConnell read the report of the case. A woman, aged 33, native of the Province; married ten years, two children. Eleven years ago she noticed that the urine was milky Had been healthy up to that time, but ever since had not been so strong. The white appearance of the urine has persisted, with occasional periods of intermission, two of which were while she was pregnant. Came under observation on October 27th. Was pale, anæmic, moderately emaciated. Appetite good, is constantly hungry, and eats five or six meals a day; sleeps well; bowels very constipated. Has to make water very frequently, nearly every half hour, and is of the color of milk. Sometimes very painful to pass from the presence of thick, clotted portions. A sample passed was quite fluid when fresh, but in a few minutes a large part of it curdled. Examination of abdominal organs negative. In chest, râles at apices of lungs. On three occasions the blood was carefully examined by Dr. Osler and myself, a number of slides at a time, and the blood taken after midnight, but no filarian embryos were ever discovered. The quantity of urine passed was estimated for several days, and ranged from six to eight quarts; often the clots were blood-stained. Microscopically, it presented fatty molecules, like the molecular base of the chyle a few blood-cells and leucocytes. Repeated examinations failed to detect any parasites. The condition of the patient grew gradually worse through the winter; the cough became more distressing, and the digestion much impaired. Death took place on the 5th of March. For three days before dissolution the urine was bloody and not so abundant. The *Post-mortem* was held on the 18 inst., the body, which had been in vault of the cemetery, was in a good state of preservation. A careful dissection was first made of the thoracic duct and receptaculum, but, as the specimen shows, it appeared perfectly normal, perhaps a little small, but pervious throughout, and contained a bloody lymph. No dilated lymph vessels about the kidneys, or any special connection between renal and abdominal lymphatics. The mesenteric and retro-peritoneal glands were a little enlarged and firm, and, on section, presented opaque areas of fatty degeneration. No caseous or calcareous glands. Lacteals not distended. Kidneys were of average size, capsules detached easily, substance a little blood-stained, but looking very natural. Ureters normal. Bladder contained six or eight ounces of bloody flood, which had clotted. Mucosa normal. Inguinal and pelvic lymph glands not enlarged. Turbercular cavities at apices of lungs and a few ulcers in the ilium. The lymph glands, retro-peritoneal tissues, mesentery, and kidneys were subjected to prolonged microscopical examination without producing a trace of anything parasitic, or, indeed, of anything which threw any light on the nature of the affection.

Dr. Roddick asked if it were not possible that in the course of the disease the filaria might disappear?

Dr. Osler thought it not probable, without leaving some trace of the presence of the adult worms which live in and about the lymph glands in pelvic and peritoneal tissues. The value of this case was considerable, as it showed that we should not regard, as some recent writers do, chyluria and the filarian disease as identical.

Inflamed Umbilical Hernia.—Dr. F. W. Campbell read the notes of the case: Stout woman aged 64, had had irreducible umbilical hernia for fifteen years. Had been seen four years ago, with a painful attack in the hernia which subsided in a few days. On the morning of April 9th was sent for, and found her suffering great pain in the sac. The pad had got off, and without waiting to replace it, she had jumped out of bed, and was at once seized with severe pain. The hernia has been getting a little larger of late, and the pad was too small. It was at once reduced to the usual size without difficulty, but the pain continued. Liq. opii. sed. was given (hypodermic). An enema brought away many scybala. In the afternoon, she was not so well, and vomiting set in. On the 10th she was easier, and on the 11th pain was well kept down, but the vomiting was excessive. An

injection brought away a large fecal stool. Had a restless night on the 12th ; pain has returned, but not so severe.

Was seen by Drs. Howard and Fenwick, but it was decided that the symptoms scarcely justified an operation. Through the 13th and 14th she kept about the same ; the vomiting not so frequent, and on the evening of the 14th she seemed very much better. Early in the morning of the 15th she got much worse, became cold, sank rapidly and died in a few hours. The autopsy showed a thin-walled unbilical sac, not inflamed. In it were two coils of intestine ; one, about thirteen inches in length, was dark-colored, deeply congested, and inflamed ; the other, nine or ten inches in length, was natural looking, though a little swollen. Two fingers could be passed into the ring ; there was no strangulation. There was no adhesion of the bowel to the sac. The inflamed portion of the bowel presented two flat bands of slightly thickened peritoneal tissue, where it has been probably for years in contact with the ring. The inflammation had extended along the adjacent coils in the abdomen for a few inches. When slit open, mucosa intensely inflamed, of a deep, livid-red color, and covered with closely adherent flakes of croupous exudation. Heart fatty. No other changes of note.

A difference of opinion had existed regarding the existence of strangulation in this case, and the propriety of operating. From the *post-mortem* appearance, it did not seem probable that nipping of the bowel had occurred, as the ring was large and a healthy coil was in the sac. It may have been simply the result of a primary inflammation of the hernial coil, which had evidently been in the sac for years, as it was dark with pigment. One of the most inexplicable features of the case was the sudden heart failure ; but she had been taking very little nourishment, and the vomiting had reduced her strength very much.

Cancer of the Stomach.—Dr. Wood presented the specimen and narrated the case. A woman, aged 55, had suffered for a year or more with dyspeptic symptoms, and two months ago had vomited a small amount of blood ; had lost flesh, but was not cachectic. No tumor of abdomen could be made out, but cancer of the stomach was suspected. The details of the last week of her illness are as follows : On April 14th, 15th, and 16th she had a good deal of nausea and vomiting ; on the 17th she went to bed, and I saw her for the first time in several weeks. There was vomiting and considerable epigastric pain ; pulse about 90. On the 18th she was easier ; 19th much worse ; fainted in the night ; pulse weak, 115 ; face pale, feet cold, vomiting frequent. In the evening the temperature was 101°; pulse 120 ; the pain in abdomen was more diffuse, and there was considerable distension. On the 20th, condition did not improve, though, under opium, the distress was not so great. On the 21st prostration more marked, and the next day the vomiting was distinctly fecal and frequent. Death on the 23rd.

At the autopsy, the small intestine from an inch or two below the duodenum to within two inches of the valve, was dark in color, distended, and covered in places with a thin sheeting of lymph. Several spots in the ileum looked almost gangrenous, and here and there extravasations had taken place. The coats were infiltrated, the mucosa soft, and there were three spots (ulcers) from which the membrane had disappeared.

The stomach, as shown by the specimen, presented a large open cancer, involving the cardiac end, and completely encircling the organ. Several loose sloughs adhered to the surface, but over a great part of its extent the muscle fibres were bare. There was thickening of the peritoneal surface and a few secondary nodules. In looking for the cause of the condition of the bowel the vessels were carefully examined, and the superior mesenteric artery found to be plugged.

Sarcoma of Kidney in child 5 years of age.—Dr. Alloway briefly related the following history of this case :—The disease, when first noticed, appeared as a tumor, extending from below the ribs to within an inch of the crest of ilium, on the right side. The growth gradually increased during the next three months, until, at death, it filled the whole abdominal cavity. The tumor weighed nine pounds, and was, on microscopical examination, found to be a round-celled sarcoma.

Dr. Osler also exhibited *Scirrhous disease of pancreas and colloid lung*, taken from the same patient, and the *kidneys* from a man found in a comatose condition outside the city. He was brought first to a police station, and from there sent to hospital. He never became conscious, but died a few hours after entering hospital. Albuminuria was suspected; the catheter was used, and urine loaded with albumen withdrawn. The kidneys were about normal size, and but slightly congested.

Dr. Shepherd then exhibited specimens as follows :—

1. *Abnormalities of Aortic Arch.*—(*a*) A case of large middle thyroid artery. It passed up the middle of the neck lying on the trachea, and divided about half an inch below the cricoid cartilage into two branches, which went to right and left side of the trachea. (*b*) Two examples of the left carotid arising from innominate artery instead of from the arch. This was mentioned as being the normal arrangement in many animals, as the dog, rabbit, &c. (*c*) One example of a left vertebral arising from the arch of aorta instead of from the subclavian. It was of large size. The right vertebral was very small, not being larger than a crow quill. The branches from the right subclavian in this case came off separately, no thyroid axis being present.

2. *Persistence of the Left Duct of Cuvier, or double superior vena cava.*—This specimen was obtained from a female subject aged about 65. The vein was about the size of a pen-handle, The left vena innominata was not much reduced in size, as is the case when the persistent duct is large. This was the second example of this anomaly that Dr. Shepherd had met with. The left duct of Cuvier persists normally in birds and some mammals.

3. *Dissection of a case of Talipes Varus.*—Dr. Shepherd obtained this specimen from a subject in the dissecting room, aged about 45. The foot had never been operated on, and was a pure case of talipes varus. The deformity was due principally to the contraction of the tibialis anticus, extensor proprius pollicis, and extensor communis digitorum, tendons.

4. *A preparation of an abnormal right obturator artery* given off from the epigastric and passing to the inner side of the femoral ring.

5. *An Inferior Maxilla*, having a large sinus in the body leading down to the decayed root of an incisor tooth.

6. *The Uterus of a Young Girl*, aged about 16, which had the os uteri so narrowed as to admit a fine probe with difficulty.

Progress of Medical Science.

DIAGNOSIS OF LUPUS.

By Dr. McCall Anderson, in *Medical Times and Gazette.*

Lupus Vulgaris.

1. Commences usually before the age of twenty-five, and often much earlier in life.
2. An indolent, painless affection.
3. Edges of patches, though often round and elevated, are soft.
4. Ulcers in most cases superficial, soft, throwing out profuse granulations, and edges often undermined.
5. The nose is the part of the face oftenest attacked.

Epithelioma.

1. Occurs usually in persons getting up in years.
2. Tingling, and pain often lacerating in character, common.
3. Edges hard, everted, and often having a glistening, translucent appearance.
4. Ulcers oftener deep, hard, with uneven, finely granular appearance, and exuding a sticky fluid, which gives a varnished appearance to the surface.
5. The nose is not more frequently involved than other parts of the face.

Lupus Vulgaris.

1. Commences early in life, generally before twenty-five.
2. Often a history of hereditary tendency to strumous affections.
3. Oftenest met with on the face.
4. Ulceration has tendency to throw out profuse granulations, and edges often undermined.
5. Color of eruption yellowish red or violet.
6. Often of many years' duration.
7. Cured by the use of caustics and anti-strumous remedies.
8. Often other manifestations of the strumous diathesis.

Late Manifestations of Syphilis.

1. Appears usually after the age of twenty-five.
2. History of syphilis having been acquired.
3. On any part of the body, though often upon the face.
4. Ulceration as if cut out with a punch, and base ash-gray.
5. Color of eruption in the chronic stage usually coppery.
6. Chronic, though not nearly so much so.
7. Cured by mercury or iodine.
8. Generally other manifestations of syphilis.

—*Louisville Med. News.*

NEW TREATMENT FOR GONORRHEA.

A correspondent writes to the *Lancet* concerning what he considers a rational treatment of this common affection. He gives regularly five-grain doses of iodide of potassium, and full doses of cubebs in powder, every three hours. The cubebs in drachm doses he finds rarely fails to cut off the ailment rapidly, and the iodide, besides its solvent influence on the essential element of the powder, has a well recognized action on the various mucous surfaces.

GASTRIC IRRIGATION.

This operation is becoming every day more recognized as useful in suitable cases. Bianchi relates four cases: 1. Chronic gastritis, simulating cancer, pains in the right side, great emaciation, vomiting of food and blood, followed by relief. Many remedies were tried with no good effect until irrigation of the stomach with water at 53.5° or 58° F. was resorted to. The patient felt better the same day. The irrigation was repeated every morning, at first with plain water, afterwards with water containing two drachms of bicarbonate of soda to the quart. The patient was discharged cured in a month, having gained 5 pounds in weight. 2. Chronic catarrh (drunkard's) with probable pyloric stenosis of inflammatory origin. There were pyrosis and vomiting of food, preceded by pain in the epigastrium; cure, in a month. 3. Gastric catarrh, with marked dilatation of the stomach. Great improvement followed in three days, when the patient left. Carcinoma of stomach; fixed pain in the pyloric region, vomiting of blood. The patient experienced much relief from the irrigations, and was able to take liquid nourishment, and gained strength for a time, but died after a month, worn out by the cachexia and debility.—*London Med. Record.*

HOT WATER AS A GARGLE.

Dr. Ritzy has found hot water systematically employed as a gargle of great benefit in overcoming the sensation of rawness incident to acute pharyngitis. He found that the use of hot water paled the red and inflamed mucous membrane more or less permanently. And, so far as unpleasant personal sensations went, it cured the pharyngitis. He also believes that this simple plan of treatment would prove beneficial in diphtheria, in patients old enough to gargle intelligently. In ordinary tonsillitis hot water, he thinks, would hardly fail to act well. The water should be used as hot as can be well borne, and gargling should be practiced for several minutes at a time.—*The Medical Age.*

TREATMENT OF CONSTIPATION IN INFANTS.

Dr. C. T. Renter, of New York, has found a combination of castor oil and glycerine of very great value in the constipation of infants. He gives a half teaspoonful of each at a dose. We notice that this experience conforms to that given by Mr. Wm. Soper in the *Lancet*. Mr. S. regards glycerine as peculiarly valuable through its solvent action on the hardened masses which have accumulated. In chronic constipation, hemorrhoids and anæmia the combination has done good service in hts hands.

Dr. Geo. R. Young, of Belfast, writes to the *Lancet:* A mixture, which is of an agreeable flavor, and in which the nauseous smell of the oil is efficiently disguised, can be made thus:

℞	Ol. ricini.,	ʒ j,
	Glycerinæ,	ʒ j,
	Tr. aurantii.,	M xx,
	Tr. senegæ,	M v,
	Aquæ cinnam.,	ad ℥ ss.

This forms a beautiful emulsion, is easily taken by children, and administered at bedtime will produce a gentle motion the following morning. In cases of habitual constipation, when this mixiure is repeated for three or four nights, it brings about a regular morning motion. The tincture of senega is used to emulsify the oil, and as the quantity employed is small its use cannot be objectionable from a therapeutic point of view.—*Med. Summary.*

SIMPLE TREATMENT OF CONGENITAL CLUB-FOOT.

It is unfortunate that so much of mystery and specialism hangs about the treatment of club-foot. It is too generally thought that it consists solely in tenotomies and the application of complicated and expensive shoes of various kinds which none but the specially initiated can understand. And for this reason cases are often left untreated just when simple treatment would be most quickly successful. For club-foot, like every disease and deformity, is more amenable to treatment in its early uncomplicated stages, and many a case which in later years is cured only after long and wearisome treatment would have been comparatively easily dealt with in its earliest stages. The great objects to be attained in all cases of club-foot are to replace the part in its normal position with the help of tenotomy where necessary, to retain it in that position for a sufficient length of time, and to exercise and stimulate the development of the weakened muscles. This can all be done in congenital club-foot from the earliest days, and ought to be commenced at once. The hand is the proper instrument to correct the deformity, and a plaster-of-Paris splint just strong enough for this

purpose is the best means of maintaining the foot in the proper place. This splint, if made after the Bavarian pattern, can be removed every day for the foot to be rubbed and electricity applied; or the more common form of plaster-of-Paris splint may be removed for the same purpose every two or four weeks. If practitioners would treat their cases of club-foot in this way from the very first, many would be almost if not quite cured before the child began to walk, when the difficulty of treatment is necessarily increased.—*Lancet.*

HÆMORRHAGE FROM THE LACHRYMAL DUCT DURING EPISTAXIS.

Mr. D. Hoadley Gabb, M.R.C.S., of Hastings, describes the following remarkable case:—Mr. S., aged 50, with mitral disease and albuminuria, sat out one of our recent sunny days, and caught a chill, which culminated in an attack of bronchitis and a relaxed state of the fauces and uvula, producing severe spasmodic cough; during one of these paroxysms, epistaxis, from the right nostril especially, came on rather profusely, and I was sent for. There was no difficulty in arresting it by plugging the anterior nares with dry lint. In two or three hours, after a severe cough, the hæmorrhage returned, and a messenger was sent for me, saying the bleeding had come back, and was running out of his nose and eyes; and so I found that the blood had welled up through the right lachrymal duct, and was suffusing his eye, so that he was constantly obliged to wipe it, and the handkerchief was pretty well stained with the blood, and the discharge only ceased when the nose left off. I have never met with the phenomenon before, neither have others to whom I have mentioned it; and so, I think, perhaps it is worth recording."—*British Medical Journal.*

REMEDY FOR CONSTIPATION.

Pulv. aloe	30 grains.
Ext. belladonnæ fl	20 minims.
Ext. nucis vom. fl	30 minims.
Pulv. ipecac	3 grains.
Tinct. gentian comp	2 ounces.
Syr. simp. to make	4 ounces.

M. Sig.—Teaspoonful on the evening of each day when the bowels have not moved. This dose is for adults. For children, five drops for each year of age.

HOT PACK IN PUERPERAL ECLAMPSIA.

Dr. Brens expresses the opinion in the *Arch. f. Gyn.*, that for the cure of puerperal eclampsia, either in the puerperium or the last months of pregnancy, active diaphoresis alone, induced by a hot bath, 40 to 45° C, followed by the pack, is all sufficient. The bath must not be prolonged over one-half hour, and two to three hours suffices for the envelopment in the pack. This method properly carried out, according to Brens, will also cause œdema and albuminuria to disappear without interruption of pregnancy.

OZÆNA.

In several cases of chronic inflammation of the nasal and pharyngeal cavities, giving rise to offensive discharge, Dr. Poore has found decided benefit result from the use of a stimulant and antiseptic snuff having the following formula: biborate of soda, nitrate of bismuth, of each one drachm; disulphate of quinine, ten grains; iodoform, five grains. This snuff has the effect of stopping the fetor and greatly diminishing the amount of discharge from the nostrils. It is liable, as are all snuffs when used for similar conditions, to cake in the nostrils, and it is therefore necessary to thoroughly wash out the nostrils once a day. This may be done by means of a nasal douche, or the patient may easily be taught to snuff a lotion up the nose and allow it to run out of the mouth. A teaspoonful of glycerole of borax dissolved in a wineglass of tepid water forms an excellent wash for the nose, and with a little instruction patients learn how to wash out their nasal and pharyngeal cavities without the aid either of syringe or douche apparatus. In cases where the ozæna is of a simple kind, not due to caries or necrosis of bone, but rather to a sluggish, inflammatory action occurring in a scrofulous subject, considerable benefit is often derived from the administration of the sulphide of calcium in doses of half a grain (in pill), taken three times a day. It is often necessary to cleanse the nasal and pharyngeal cavities with a brush inserted throught the anterior nares, and also behind the soft palate so as to reach the summit of the pharynx. The brush may be moistened with glycerole of tannin, and after the cavities have been cleansed a little iodoform may be passed into the cavities on the tip of the brush.—*London Lancet.*

INFLAMMATION OF THE HAIR FOLLICLES OF THE NOSE.

The St. Louis *Courier of Med.* says: Dr. Hardaway called the attention of the St. Louis Medico-Chirurgical Society to the inflammation of the follicles of the small hairs in the nose. They give intense pain, and there is much inflammation externally as well as within, and very frequently, after the inflammation of the hair follicles subsides, it is followed by *exfoliation* of the outer portion of the skin of the nose; in other words, the patient has a very red nose. Externally, it is generally limited to one or the other side; there is a great deal of sharp, very acute, intense pain. The cases generally continue for weeks, very frequently last several weeks, and when it subsides, there is considerable epidermic shedding—desquamation—showing the

violence of the inflammation. They are cases that try the patience of the doctor and the patient both. Within the last year he has been using a treatment which has given great satisfaction. He uses Squibb's glycerole of the subacetate of lead and glycerine, one part of the first to seven of the latter. Under this treatment, the trouble disappears rapidly.—*Med. and Surg. Rep.*

IODOFORM AS A LOCAL APPLICATION IN FISSURE OF THE ANUS.

The value and efficacy of iodoform in fissure of the anus will bring this remedy into general use in the treatment of this painful and heretofore incurable lesion, without operation by the knife or forcible rupture of the sphincter ani muscle.

It is good surgical practice to cure surgical cases without surgical operation whenever it is safe and praticable; and while it is shorn of its brilliancy and eclat, the fact remains the same, and it is not questioned that conservatism in surgery has been steadily gaining ground, and that the boldest operators are those who weigh well the results before operating.

As in cases involving the greatest danger, so with fissure of the anus—if the trouble can be cured by simple means, without suffering to the patient, and in reasonably due time, the operation of cutting, or forcible rupture, is not justifiable, and both these means of radical cure must give way to the more simple, if such may exist. With the experience I have had in the use of the local application of iodoform in cases of fissure of the anus, I am encouraged to bring the value of this remedy to the notice of the profession in these cases. In their treatment with this remedy, the alvine evacuations should always be maintained in a soft condition; the bowels should never be allowed to become constipated or relaxed; the anus, and parts involved by the fissure, should be kept constantly clean and free from deposit and dry incrustations; and with one or two evacuations a day, the case may be speedily cured by the local use of iodoform. It may be dusted, in *very fine* powder, upon and into the fissured parts, or applied in the forh of ointment or suppository. The application of the simple powders, if properly prepared, three or four times a day, after each evacuation, and in the intervals, is often sufficient. In some cases, however, the undiluted powder—although thoroughly powdered—causes some pain. In such, the iodoform may be mixed with powdered gum acacia, if a powder be preferred, or may be made into an ointment with vaseline, or suppository with the oil of theobroma. Balsam of Peru, carbolic acid, and oil of peppermint, will moderate the intensity of the iodoform odor; but this can hardly be requisite for application in this situation. The application of the remedy may be followed by a little smarting, but soon after its use the sensibility of the parts becomes benumbed, and even defecation may go on without consciousness, so far as concerns the development of pain during or after the process. That this remedy applied as above directed and indicated will cause complete unconsciousness of the act of defecation, I doubt—I have never witnessed such result in any case that has come under my notice, and still the benumbing influence of the remedy is decidedly potent. As in applications to the conjunctival surfaces of the eyelids, the first and most important factor in the successful and painless use of the remedy consists in the proper preparation of the powder. It should be made *very fine*, and not the smallest crystal be allowed to remain unpowdered. The neglect of this precaution when applied to the eye has caused the most painful inflammation of the ocular and palpebral conjunctiva; and applied thus imperfectly powdered to the anus, would likewise cause intense suffering, and as in eye practice, would be abandoned, and declared to be dangerous and valueless, if intelligence did not bring relief.—*Med. and Surg. Reporter.*

A case of relief from intra-cranial abscess by trephining, is reported by Dr. Kilgariff in the *British Medical Journal*. His patient had been thrown while hunting, and had been unconscious for two hours after. At the end of the second week he suffered from much pain over the occipital bone and from gastric irritability. A shallow depression being found over the seat of pain, he diagnosed fracture with formation of abscess. On incising the scalp he found pus, which came through a minute opening in the skull. He removed a button of bone with the trephine and evacuated half an ounce of pus. The abscess cavity was washed out with carbolized water, and the man made a good recovery in spite of erysipelas.—*St. Louis Med. Review.*

An interesting article describing the properties of the new remedy, ichthyol is communicated to the *Deutsch Med, Zeitung* by Dr. P. G. Unna, of Hamburg. It is an easily soluble substance, very volatile, of strong odor, containing a large proportion of sulphur, which on heating readily divides into H_2SO_3, S, etc. It had been in popular use before its employment in diseases of the skin. Dr. Unna has used it in all forms of acute and chronic rheumatism, and considers it an antirheumatic of first rank, there being no other external remedy of similar efficiency. He uses it with vaseline in a strength of ten per cent. and more, brushed on the painful joints twice daily, and keeps the limbs in the meantime wrapped up in cotton. It has an analogous action with horses suffering from stiff joints, as has been reported by several veterinary surgeons. It has also been employed with benefit in lumbago, bronchial, nasal and laryngeal catarrh (inhalation of two per cent. solution), and in angina it is applied either with the brush or as spray. In parasitic diseases of the skin it is of

benefit. The doctor has not yet employed it internally, but thinks it indicated in mild catarrhs, in hemorrhoids and parasites of the intestines. Of the undesirable action of ichthyol the writer mentions a general and local hyperhidrosis. It tends to increase the thickness of the skin, hence its beneficial effect in eczema, and so produces eruptions of miliaria. To counteract this the doctor recommends the powdering of the parts after applying the remedy, to facilitate the rapid absorption of perspiration, or by adding mildly macerating preparations, such as lime, for instance: ℞ Ichthyoli, 10.0; ol. olivæ, ap. calcis, aa 100.0. M.S.—To be well shaken before using, or, make a pause and intercurrently use warm baths made by means of sand, spent tan bark or white bolus, with the addition of a little soda. *St. Louis Review.*

Ichthyol (Monatsh f. Pract. Dermat.) is a substance which looks like tar, has a peculiar herbaceous odor and is of the consistency of vaseline. It is partly soluble in alcohol, partly in ether, and wholly in a mixture of both. It can be mixed with vaseline or fat in any proportion. It contains a large per centage of oxygen and ten per cent. of sulphur. The healthy skin is not irritated by it, while it has a very beneficial effect in all forms of eczema, and is to be used in gradually weaker strength as the eczema heals. In grown persons with papulous eczema it may be used as strong as fifty per cent. at first. The itching and pain are relieved, and soon the surface becomes drier and paler. It may advantageously be combined with salts of metals, as it does not form any sulphur derivatives with them. Ichthyol is made from a bituminous mineral, found in the vicinity of Seefeld in Tyrol. The color of the rock is light to dark brown, it contains from ten to sixty per cent. of bitumen. In the neighboring layer a great many impressions and petrefactions of fish are found, so that the Geologist, Prof. v. Fritch, expressed the opinion that the bitumen contains the remains of antediluvial marine animals and fish. At any rate, from this discovery the preparation derives the name ichthyol. The mineral is subjected to a dry distillation, and a tarry product obtained, which, after careful cleansing, is treated with concentrated sulphuric acid; the sulphate produced is the substance under consideration. *St. Louis Med. Review.*

THERAPEUTICS OF THE THROAT.

By A. N. Ellis, M.D., Lecturer on Laryngology, Cincinnati College of Medicine and Surgery.

Gentlemen:—In speaking of the special and general treatment of diseases of the throat I will pass over the latter very briefly. Before going further I shall call attention to the fact that the morbid conditions which underlie all affections of that important region are but few. Take away syphilis, tuberculosis and that which comes in the train of the eruptive fevers, and we have very little left on which we may dwell long in speaking of the application of remedies for the purpose of building up the system or of eradicating constitutional vices or weaknesses. Hence the most of this paper will be given to the consideration of topical remedies and the use of different instruments. Time flies so rapidly that it seems but yesterday since Prof. Tuerck first used the laryngoscope in the Vienna hospitals, yet in that short space of time wonders have been done in detecting and remedying the defects and diseases of the human voice. Light has been thrown into dark places, slight changes have been readily diagnosed, growths, ulcerations, swellings, thickenings, deformities and abrasions are seen at a glance, and thus every appliance of science is brought to the aid of the most useful and fascinating specialty in the whole domain of medicine and surgery.

When Helmholtz invented the ophthalmoscope he opened the realm of a new world. Four years later came Tuerck, with the laryngoscope, and the voice of the dumb broke forth into songs of thanksgiving when set free by the skillful hand of our God-given art!

In speaking of the medication of the throat I shall pre-suppose a ready and complete knowledge of the throat-mirror, for without making ourselves master of that little instrument we may as well content ourselves with a simple tongue-depressor, and throw in general treatment after the crude old-fashioned way.

I shall speak of gargles, lozenges, inhalations, fumigations, pigments, sprays and douches. The limits of this paper will prevent my noticing, as I would like to, dietetics and hygiene. Ever keep in mind that in all specialties, as in general practice, our therapeutical methods must be adapted to the exigencies of our cases. Age, sex, constitution, individual and family history must all be taken into account. When we remember the great importance of the throat—that we must all breathe and swallow in order to live—slight changes in form and the presence of certain growths and inflammations are of the greatest moment, for upon this condition of things very often hang the issues of life and death. The age in which we live is one that demands accurate scientific knowledge. What we know we must know well; and what we are to do, must be *done at once*, and with the greatest judgment, knowledge and skill. Many a valuable life has been snuffed out in a moment by a transient œdema, which might have been relieved by a trifling operation. The most terrible scene in the life of the illustrious Washington was the short hour when he choked to death for want of a hand to save him!

I. Gargles.—Gargles have always held a prominent place in all works on the throat. They are as popular as they are time-honored, yet after all they are of very little use, for they scarcely ever penetrate behind the anterior pillars of the fauces

I will not deny that they are very good mouth-washes, and as such prize them for their antiseptic and astringent qualities. Do not understand me as denying their valuable properties, but do not forget at the same time that very few persons ever learn to gargle properly. I have heard of some people who could go so far as to let the fluid penetrate into the larynx, yet have never seen such a patient in my own practice. Of course in the case of children this class of remedies is not to be thought of.

II. Lozenges.—I look upon this form of preparations as the most valuable we have at our command. When we come to speak of lozenges, the American pharmacopœia is almost poverty-stricken when compared with those of other countries, for in Europe they are more skillfully prepared and much more used than in this country. They are generally small, dry, solid masses, usually of flattened shape, consisting for the most part of powders incorporated with mucilage and sugar. They are to be held in the mouth and dissolved slowly in the saliva, and are therefore well adapted for the administration of remedies which do not require to be given in large quantities, and are destitute of any very disagreeable flavor. One great recommendation in favor of troches is that they are convenient, and I look for the time to come when the throat specialist will be armed with many of his drugs in this shape. Here we get not only an immediate local effect, but also the constitutional action of the drug, and this is often greater in proportion than if a corresponding amount had been taken direct into the stomach. Guaiacum may be instanced as an example of this.

One great drawback to the use of lozenges is to be found in their hardness, their consequent slowness to dissolve, and their liability to produce erosion—inconveniences which may be obviated by incorporating their ingredients with fruit paste which not only renders them more palatable but also facilitates their dissolution. Right here permit me to call attention to their effects upon the stomach and their liability to interfere with digestion. The U. S. Dispensatory contains 14 formulæ for lozenges, one of the most valuable of which is that of morphine and ipecac (in the proportion of $\frac{1}{36}$ of a grain of the former to $\frac{1}{12}$ of the latter) in the treatment of an irritable and painful cough. The troches at the Golden Square Hospital are, with the exception of those containing carbolic acid and marsh mallow, all made of fruit paste, tragacanth and a small quantity of refined sugar. I have often thought that one reason why Morrell Mackenzie has such great success in his specialty is due to the fact that he gives the strictest personal attention to the purity and elegance of his preparations.

III. Inhalations.—These are subdivided into vapors, sprays and fumigations. We cannot give too much praise to this class of remedies, for it includes the most reliable and effective methods of applying remedial agents to the throat and larynx. From earliest time the inhalation of vapors has been a recognized means of medication. In the treatment of bronchitis, asthma, and other pulmonary affections the inhalation of watery vapor impregnated with stramonium, hyoscyamus, camphor and substances of the same class, has been found a useful means of allaying spasm and irritability of the bronchial tubes. During the last decade great strides have been made in the application of remedies to the diseased mucous membrane of the air passages, which has been attended with the most gratifying results.

(*a*) Vapors.—Vapors are of two kinds, aqueous and volatile, and these may be further subdivided into moist and dry, and the former into hot and cold—hot when the temperature ranges from 130° to 150°, and cold when it is from 60° to 100°. Dry inhalations should always be hot, *i.e.*, heat must be applied in order to vaporize certain volatile matters. Of course it is understood that a suitable inhaler should be used.

Inhalations are employed for their action as antiseptics, antispasmodics, hæmostatics, resolvents, stimulants and sedatives. Truly a wide range of application, and hence the remark just made in regard to their value. The best time to administer them is before meals. If hot vapor is used, every precaution should be taken against the danger of taking cold, and for this purpose the patient should not go out of doors for at least 30 minutes. In the case of cold inhalations this precaution is not necessary; indeed it is very often the case that the use of a cold inhalation will procure for the patient an immunity from catarrh which he had not previously enjoyed. Morrell Mackenzie, at the Golden Square, Prosser James, at the North London Consumption Hospital, and Lennox Browne, at the Central London Throat and Ear, all make use of volatile oils—the oil being held in suspension in water by means of light carbonate of magnesia in proportion of one-half a grain of the mag. to one minim of oil. These are divided into sedatives, antispasmodics and stimulants. Of the strong stimulants, liquor ammonia, vapor of chlorine and iodine are at the head; speaking further we have a list of milder ones, beginning with carbolic acid and running down through camphor, cinnamon, cubebs, creosote to juniper and pinus sylvestris. Of the sedatives, chloroform, ether, benzoin, conium and lupuline are the most trustworthy. Although very inconvenient on account of its bulk, the old inhalation made by macerating hops in hot water is very soothing.

Of the antispasmodics we may briefly mention, hydrocyanic acid, ether and nitrite of amyle. It is best to reduce these inhalation mixtures to a uniform standard of one ounce—a teaspoonful to a pint of water at a temperature of 140° constituting an ordinary dose.

The vapor should be inhaled by means of deep, full inspirations—five or six to the minute, kept up for ten minutes—twice a day. Be careful when

using ether, chloroform and nitrite of amyl, as some persons are so very sensitive to their action as to become giddy and faint in breathing in a very small quantity. Sometimes I have seen these effects from one drop of chloroform in a pint of hot water. Generally speaking, it is such a powerful remedy that we never realize the danger of using it until some sad accident has thrown its shadow across our path. Dry hot inhalations are of the greatest value in many cases of excessive catarrhal secretion.—*Cincinnati Clinical Brief and Sanitary News.*

McDANIEL'S METHOD OF ARTIFICIAL RESPIRATION.

It is said that for upward of a hundred years after the publication of his Principia, the University in which Newton toiled continued to teach in accordance with views thought to be true up to the time of the enunciation of his. If this be so—we could hope for the honor of humanity that it is not—what a significant commentary is it upon the conservatism, the prejudice, the apathy, in a word, upon all the traits that go to bind men down to grooves previously cut and fashioned for them.

Many instances of like kind might be mentioned, if one were not enough to serve our purpose.

In this issue of this Journal there is a brief review of Esmarch's lectures on aids in injuries and accidents, in which attention is called to the fact that, in resuscitating persons apparently drowned, reference is only made to the methods of Hall and Sylvester, while that of McDaniel is, it would seem, either unknown or ignored.

McDaniel's method of artificial respiration is really best suited to the cases of still-born (not dead) infants, but we think with the author, that it is at the same time the best means of reviving respiration without regard to cause. This being the case, it is high time that men like Esmarch should know that there is such a thing as "McDaniel's Method." If it is not the case, it is then high time that the "Method" should be known of men, and given its proper place as a scientific procedure.

We do not see, however, why the method is not already known, for Dr. McDaniel invited the attention of the medical public to it so long ago as 1869, in a paper read before the American Medical Association, and published in the transactions of that body for that year. He also read an elaborate paper on the same subject before the Alabama State Medical Association at its annual meeting in 1879, which can be found in the transactions for that year. From this it is evident that Dr. McDaniel has not hidden his light under a bushel; notwithstanding, it is apparent from an editorial in the *Philadelphia Medical News* of Aug. 12, 1882, that its learned editor knows nothing of McDaniel's claims.

In regard to the validity of these claims, it is proper to say in this connection that they were submitted by appointment to a committee, selected from among the ablest medical men in Alabama, and, after mature test and deliberation, substantiated and acknowledged.

Dr. McDaniel does not propose to set aside all other methods of artificial respiration "but," as he says, "merely to introduce into general practice a new one of very great efficacy, very safe, of very convenient and speedy application, very easily comprehended, and especially adapted to small patients."

Without further comment, we will now quote from Dr. McDaniel's last paper, only premising that enough favorable reports have been made in the cases of new-born infants to challenge the attention of the profession.

"After," says the author, "the invention of the spirometer, by Hutchinson, it was soon ascertained that the capacity of the chest is greater in the erect form than in any reclined or recumbent position. This is a great fact for physiology, for the diaphragm is a piston whose pump motion varies the chest capacity and causes an ingress and egress of air. In the recumbent position the liver and other contents of the abdomen press upon the diaphragm and diminish the chest capacity. In changing from the recumbent to the erect position, this pressure is gradually removed and the chest capacity is increased. It is obvious that all that is necessary to cause air to enter the lungs is to change the patient from any recumbent or any inclined position to the erect one; and all that is necessary to cause the air to pass out of the lungs is to move the patient back from the erect to any inclined or recumbent position. But I have discovered that the increase of capacity in the chest is slow and small in moving from the recumbent position to an elevation of forty-five degrees, and rapid in ascending from forty-five degrees to the erect position. It is therefore not essential in practicing artificial respiration to move the patient through the whole range from recumbency to erectness, but is sufficient to use only the upper half of this range, merely moving the patient from a forward inclination of forty-five degrees to the erect position and back again. *Every upward and backward movement produces an inspiration and every forward and downward movement an expiration, and the two together a complete respiratory act. By regularly repeating these acts, artificial respiration is rhythmically performed, and can be prolonged at will.* Any one will find that if he leans forward from the erect position to an inclination of say forty-five degrees, he will mechanically and involuntarily expire, and if he moves back to the erect position he will mechanically and involuntarily perform inspiration. He cannot, by any power of volition, prevent the result or reverse it. *This simple movement upward and backward to the erect position, and*

downward and forward to a sufficiently inclined position, regularly repeated, constitutes my proposed new method of artificial respiration.—The New Orleans Medical and Surgical Journal.

TREATMENT OF URTICARIA.

Dr. G. H. Fox, of New York, read a paper on the treatment of urticaria, in which he stated that the treatment must vary with the cause of the disease. When dependent upon a gouty diathesis, such remedies as carbonate of sodium and colchicum were proper, with abstinence from meat and nitrogenous food. In gastro-intestinal disturbances, rhubarb, bismuth, and sulphurous acid were indicated.

Flatulence was often the only sign of indigestion. In a case of obstinate urticaria with frequent relapses, treated, according to the suggestion of Dr. J. M. Da Costa, of Philadelphia, with sulphurous acid with alkaline baths at night, a notable improvement occurred on the second day, and a cure, without subsequent relapse, was accomplished by the end of the second week.

Drugs which acted upon the nervous system, such as quinine and others, had both caused and cured urticaria. Some patients were intolerant of quinine, and invariably suffered from use of it.

Dr. F. D. Lente had noted cases of malaria ushered in by premonitory urticaria. In one peculiar case the urticaria appeared every evening at seven o'clock, and was cured by ten-grain doses of quinine.

Belladonna and atropine had been used in doses sufficient to produce flushing of the face. The reader—Dr. Fox—had seen less benefit from atropine than belladonna.

Salicylate of sodium in doses of one grain every hour had relieved the disease, but larger doses had more frequently produced it.

The use of arsenic had given rise to contradictory reports. Bromide of potassium had been effective. Drop doses of copaiba had been used in vain by himself as well as others.

The use of these various remedies, and of half-drachm doses of ergot, showed that the treatment of urticaria was empirical, and the good results reported were often attributable to careless observation and to self cure. The proper treatment depended upon the etiology.

Dr. Rochester stated that he had seen a good deal of urticaria, and had found that an emetic such as ipecac, was much more efficacious than other remedies. It was possible that diaphoretic action had something to do with it. He had a patient upon a simple milk diet, taking four or five quarts a day, with much benefit.

REVIVAL OF BLOOD-LETTING AS A THERAPEUTIC RESOURCE.

In the Paris letter to the *Lancet*, the views of two of the most prominent practitioners of that city with regard to blood-letting are referred to as follows: "Professor Peter, who was one of Trousseau's most fervent disciples, and present editor of his clinical work, employs venesection on rather a large scale, particularly in cases of apoplexy and epilepsy, in which Professor Trousseau condemned it altogether. At his clinical meetings, and in his lectures at the School of Medicine, Professor Peter teaches that, with all deference to his former master, he has found by experience that blood-letting, if judiciously employed, is invaluable in some cases, and apoplexy is just one of those in which it would be found useful. As in the days before the publication of Professor Trousseau's clinical works, Professor Peter practices blood-letting at the moment of the attack, with the hope of cutting it short, and he does so at a later stage with the view of facilitating the reabsorption of the clot of blood formed at the seat of the lesion, and to moderate the congestion in its neighborhood. On the strength of this theory, Professor Peter, at his clinic, lately bled a patient who was upwards of sixty for an attack of apoplexy and hemiplegia of the left side, and he declared, at a meeting of the Medical Society, that this bleeding had been the means of saving the patient from imminent death. He employs general depletion even in the convulsions following apoplexy, with great benefit to the patient, as he had noticed that, notwithstanding the presence of a large quantity of albumen in the urine, the convulsions and the albumen had entirely disappeared after a small bleeding from the arm. Professor Vulpian employs blood-letting in its various forms in all cases of inflammation, and he has found it invaluable in peritonitis, whether from puerperal or other causes. At the Clinique d'Accouchement, Professor Depaul scarcely employs anything else in puerperal convulsions. He bleeds the patients largely and repeatedly until the most urgent symptoms are relieved, and he has frequently stated at the Academy of Medicine and at other medical societies that the results of the practice that he has carried out for more than a quarter of a century can bear comparison with any other method of treatment adopted by other physicians in similar cases; in fact, the mortality among his patients has always been considerably less."—*Med. Times.*

AN ADDRESS ON THE ANTISEPTIC TREATMENT OF DISEASES OF THE LUNGS.

Delivered at the Inaugural Meeting of the West London Medico-Chirurgical Society.

By I. Burney Yeo, M.D., F.R.C.P., Physician to King's College Hospital, etc.

Gentlemen:—When your secretary, Mr. Keetley, did me the honor of inviting me to bring

before this Society the subject of the Antiseptic Treatment of Pulmonary Diseases, I confess I at first hesitated to accept that invitation. I felt that although I had given some attention to the subject my time was at this moment so fully occupied that I should not be able to deal with the subject so fully and completely as its importance merited, or as was due to a Society so learned and influential as yours. I also felt that it was a subject which was only just beginning to be looked at from something like a firm scientific standpoint, and that from this point of view the question of the antiseptic treatment of diseases of the lungs was in its initial stage—a stage certainly full of suggestions for future investigation; but the work of examination, of experiment, of comparison, of testing, and of criticism—serious, helpful criticism—for the most part has yet to be gone through. It might then, I thought, seem premature to introduce this subject to this Society for discussion in its present stage; but when I reflected on the intrinsic importance of the subject itself, when I thought of the vast interests, direct and collateral, involved in its discussion, and of the power and influence the members of such a Society as this would possess in collecting evidence bearing upon it, I yielded to your secretary's request, relying on your kind indulgence to excuse the merely suggestive character of this address and the many shortcomings and defects which future research alone can supply. It is remarkable when we begin to look into the history of almost any subject, how little there is that is new in its facts and its phenomena. What is new resides in our mode of regarding them, our comprehension of them, our application of them. The truth is always there in the facts and phenomena of nature, but it is often only discovered after ages of observation, of experiment, and of opposition. Of opposition: how remarkable is this spirit of opposition! how remarkable has it been in the history of one of the latest and greatest triumphs and discoveries in the art and science of surgery, the antiseptic system. As if the work of discovering truth in this universe was not hard enough, men are perpetually encountering from their fellow-men the most ardent opposition in this task. In proof of what I say I need only point to the present agitation on the part of a well-known Society against all experiments on animals—a Society which, reversing the exclamation of the dying Goethe for "more light," might be fittingly designated "The Society for the Maintenance of Darkness."

The idea of an antiseptic treatment of pulmonary diseases is certainly *new* in our present mode of regarding it, in our comprehension of the phenomena with which it is concerned, and in the extended application which we propose to give to it. But the thing itself is not new, the phenomena are not new. The adoption and the success of antiseptic methods of treatment of pulmonary affections have been recorded again and again, and they have, again and again, met with opposition, and not rarely with a sort of sneering contempt. This, gentlemen, you may be satisfied will never be the case again, and for the following reason: Hitherto, or till quite lately, such efforts were empirical, and without any strictly scientific basis, but now our antiseptic methods are founded on scientific knowledge—on principles, principles that have been evolved from a series of most patient, and at the same time most fruitful, investigations, which will go far to make this latter half of the nineteenth century the most illustrious in the history of medical science. A very few historical illustrations will suffice to prove what I have said about the antiquity of the fact of the antiseptic treatment of pulmonary affections. Hippocrates and Galen used to advise the inhalation of balsamic vapors in pulmonary affections, and the latter used to recommend phthisical patients to settle in the vicinity of Vesuvius and Etna, where they could inhale sulphurous vapors as well as sea air. But we will confine ourselves to the history of pulmonary therapeutics during the last hundred years, and one of the most noticeable facts in this period is the frequency with which tar vapor has been advocated as of great value in the treatment of lung diseases. Dr. Rush of Philadelphia in 1787, Dr. Beddoes in this country, about the same time, and Sir Alexander Crichton in 1817, all stated that they had met with great success in treating cases of phthisis by inhalation of the vapor of boiling tar, and Dr. Solis Cohen, in his excellent book on "Inhalations" in connection with this testimony, says: "The use of tar vapors in phthisis deserves to be fully and systematically studied, so that safe indications may be laid down as to the character of cases to which it is most applicable." Between 1819 and 1830 the French physicians, Gannal and Cottereau, and Sir James Murray in this country, reported excellent results from the treatment of cases of phthisis with dilute chlorine vapor. One of these had noticed that the workmen in bleaching factories with chest disease visibly improve, and another reported thirteen cases of phthisis cured by inhalation of chlorine, and Louis in Paris, and Dr. Elliotson and A. T. Thompson in London, spoke well of it.

In 1835 Sir Charles Scudamore became an enthusiastic advocate for the inhalation of iodine vapors in phthisis, and after ten years' experience of its use he expressed himself as convinced of its remedial power. Piorry (between 1850 and 1860) also was an advocate for the continuous inhalation of iodine vapor in phthisis, and for this purpose he used to have several saucers containing iodine placed about the patient's pillow. He treated thirty-one patients in this way for two years; twenty were decidedly benefited, both as regards symptoms and physical signs; in seven cases both symptoms and physical signs disappeared, and four cases died. Later still Skoda used inhalations of the vapor of turpentine with much success in phthisis, pulmonary gangrene, and in catarrhal affections of the air passages.

I have selected these few illustrations almost at random from the history of pulmonary therapeu-

tics to prove to you that I was right in saying that there is nothing new in the facts, and they also go towards disproving the statement that I have lately seen made by one or two writers in the journals of the small amount of success that has attended the antiseptic treatment of phthisis.* I suppose I have as much right to speak on this subject as any of those writers, for during ten years I saw personally over 27,000 applicants in a hospital devoted to the treatment of this affection, and of all the methods of treatment of which I have had any knowledge or experience, those into which some antiseptic measure entered as an important element were certainly attended with the best results. The difficulty, however, always was to secure anything like a proper application of an antiseptic agent; and after trying various devices for this purpose, I at length devised a very simple method of continuous inhalation, which answers the purpose better than any other with which I am acquainted. I have described this elsewhere,† and you can examine the specimens of the little apparatus I have devised for this purpose that are on the table.

Let me here make a remark which, as practical men, you will at once see the force of. It is useless to attempt to test any method of treatment by applying it to cases of advanced phthisis. In such cases the mischief is done. No antiseptic agent will cause numerous suppurating cavities to close up and heal, or replace lung tissue that has been destroyed by progressive ulceration and disintegration, or remove extensively disseminated tubercular and inflammatory infiltrations. And yet how many cases of phthisis come before us already in this state. It is greatly to be regretted that certain physicians should ever have pretended to have cured such cases, and that others should seriously have tested their statements by the application of any special method of treatment to cases so advanced and so hopeless. In order that any case may be cured by any method of treatment the first and essential condition is that it should be curable. And cases of phthisis too often come for the first time under our observation long after the possibility of cure is passed. But the question for us to examine and to satisfy ourselves about now is this. Is an antiseptic system of treatment applied to lung diseases true in principle?

If we can convince ourselves that the principle is a true one, modes of application and developments in practice will be certain to follow. In the first place, then, let us inquire, What is antiseptic treatment? Antiseptic treatment applied to the lungs is one or both of two things: First, it is the prevention of a hurtful, poisonous (septic) agent getting to the lungs from without; and, secondly, it is the destruction, or the limitation of the action of a hurtful, poisonous (septic) agent already within them.

And now let us ask ourselves if there is any *à priori* reason why it should not be possible to satisfy both these indications. It was argued warmly not many years ago, as a necessary preliminary to this discussion, that it was impossible to bring medicinal agents into contact with the pulmonary surface by inhalation. This argument has been abundantly disproved by the most varied and elaborate experimental investigations.*

So, then, supposing a hurtful septic agent to exist in the lungs—and in phthisis the presence of such an agent has been demonstrated beyond all question, and its virulently septic quality established—the problem of the antiseptic treatment is this: Do we possess, or can we discover, any agent which we can convey, in the form of gas, vapor, or solution into the lungs which shall be inimical to the life and activity of this septic body? Or can we place our patient under any possible conditions of life which shall prove hostile to its growth and development? It would be illogical and absurd in the extreme to deny the possibility of such a method, or of the discovery of such an antiseptic agent, if we do not not already possess one or more. The second indication must therefore be admitted to be quite possible. Now, let us turn to the first indication. It is not only necessary to destroy any septic agent that may be already in the lungs, but we must be able to prevent septic agents from entering them with the respired air. Now, this may be accomplished in two ways: (1) We may place our patient in an atmosphere which by examination we know to be absolutely pure and free from septic particles; or (2) we may diffuse through the air he breathes an agent hostile to the life and activity of any septic particles there may be in it. This, again, is a true antiseptic treatment, and it is certainly possible in either of these two forms. If then we limit ourselves (which we had better do on this occasion) to the consideration of the treatment of phthisis, we have two things satisfactorily proved. First, there does exist a hurtful specific septic agent in the lungs. Second, an antiseptic treatment is possible. There is no beating the air in this. Gentlemen, we are here on sure and certain footing; we have reached a principle. This is only the first stone of the edifice we have to build, but it is the foundation stone. The next thing for us to do is, by patient labour in the way of observation and experiment, to apply this principle. Our object is to discover what agents there may be within our reach capable of being administered without inflicting injury to the pulmonary tissues, which may have the power of destroying or neutralizing or arresting the activity of the septic organism, which seems to be the operative cause in the origin and propagation of phthisis. I am disposed

*In my recently published Lectures on Consumption I have collected a mass of contemporary testimony in favor of this treatment.

† Lectures on Consumption. London: J. & A. Churchill.

* Vide Oertel: Respirator schen Therapie.

to believe that other common forms of diseases of the respiratory organs have a septic origin also, and call for antiseptic treatment, but we must for the present concentrate our attention on this subject of phthisis.

Already we have abundant and incontestable proof that pure air—pure, cool dry air, in unlimited amount—is such an antiseptic agent. Wherever such air is found—on the high table land of Mexico, in the elevated valleys of Switzerland, on the Kirghiz steppes of Asiatic Russia, in the pine forests of Central Germany, and on the open sea—wherever men live a life in the open air, away from the emanations of cities, and from too close contact with humanity—in all such places we hear of consumption becoming arrested and cured. The bacillus tuberculosis seems to love hot, moist air, and air freely charged with the exhalations of humanity; warmth and moisture seem to provoke it into special activity, while dry air at a comparatively low temperature seems to be inimical to it. Whoever has watched, as I have done, a large number of cases of phthisis in this country, must have been struck with the frequent occurrence of rapid advances in the disease during the first warm moist days of spring and early summer.

And here again I am tempted to quote a passage to which my attention has been recently called by my friend, Dr. Frank, of Cannes, to show how true it is that the facts we are discussing are not new. It occurs in a very able book by a German writer, "Hausrath on New Testament Times," an English translation of which has been published by Williams and Norgate. He is alluding to the mountain air of the fortress of Masada, a mountain fortress on the borders of the Dead Sea, where John the Baptist was imprisoned. There he says, Josephus tells us provisions retained their freshness for over 100 years "because the air at the altitude of the fortress was purified from all earthly and corrupt particles!" It is precisely such air—air purified from all "corrupt particles"—that we require for our phthisical patients; and if we cannot send them where such air is naturally found, we must artificially create for them an antiseptic atmosphere which they can breathe where they are; and if we are to perpetuate consumption hospitals, it is with such an atmosphere we must fill them. But the time will probably come when instead of crowding a number of consumptive patients together in the centre of a populous district of a crowded city, we shall acquire for the same purpose a good-sized pine wood with a dry subsoil a few hundred feet above the sea level, and build a certain number of scattered cottages through the wood, and hang up a number of hammocks between the fir trees and send our consumptive patients there to be aired into health! In wet weather they would make up fires of fir wood and pine cones, and so fill their cottages with balsamic and antiseptic vapors; and with open windows and a dry soil they would find the wet weather less injurious to them there than in towns. But we have other antiseptic resources more manageable than a pine wood. And here let me call your attention to the peculiar anatomical conditions of the respiratory organs, by which they are rendered peculiarly prone to septic attack, and pecially needing of antiseptic defense. The lungs is the only deep-seated internal organ in the body which is freely accessible to the surrounding air. Perpetually the outer air is passing in and out of the lung, and thus septic particles in the air can readily reach the pulmonary surface, which is most richly supplied with absorbent vessels. But if, owing to the anatomical disposition of the parts of the lung, septic bodies can readily reach it from without, for the same reason antiseptic particles can also be readily brought into contact with it, either in the form of gas or vapor or fine spray and mist or even fine solid particles.

It is needless to offer you any proof of this. You will, I take it, all except this statement as proved; and you are no doubt familiar with various forms of apparatus devised for the purpose of carrying out such applications. But though we may sterilize or destroy in this way such germs or microbes as may commonly occur in the surrounding atmosphere, and so purify and render harmless the air that passes in and out of the lungs in respiration, it does not follow that the agents we now know to be germicines, such as carbolic acid, eucalyptol, thymol, etc., and which are used by surgeons on account of that property, are necessarily destructive of the tubercle bacillus. Analogy would lead us to conclude they might be, and the experience of their use in the hands of many competent observers* tends to strengthen this view. But we must not rest satisfied with this; we must pursue our studies of the life history of the tubercle bacillus until we have discovered what is the particular agent or agents which are especially inimical to its development and activity.

There is another difficulty which we must be prepared to encounter—the difficulty of inducing patients to submit to a continuous process of disinfection. It is by no means easy to induce phthisical patients to wear, almost continuously, even so light and simple an appliance as the one I have shown you, and it would be infinitely more difficult to get them to inhale a spray for many hours a day, supposing it should be discovered that the best antiseptic is soluble in water but not vaporizable at ordinary temperatures, as was the case with the benzoate of soda of which so much was expected by some. But I believe this difficulty would almost entirely disappear if our knowledge became absolutely precise, and our confidence in our remedy completely assured. If we could say to our patients "by this means you will be cured, and by no other," this difficulty would, I am persuaded, almost cease to exist. Hence, however, we see the obvious advantage of being able to re-

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* Lectures on Consumption, Appendix to Lecture 2.

move our patients to an antiseptic atmosphere where they cannot help inhaling the curative agent continuously.

And now I must bring these merely suggestive observations to a close. In the foregoing remark I have chiefly endeavored to show that the idea of an antiseptic treatment of lung diseases is based on scientific data, and that in principle it is established as a truth. What lies before us is to overcome the difficulties in its application. We should be encouraged in this work by the thought that whatever progress we are enabled to make we shall be furthering the labors of the great experimental pathologists of our times, the labors of men like Pasteur, Koch, and Lister. It is not given to every one to be enabled to work with a genius and an energy like theirs. But let me remind you that one of them—Koch—was a country doctor, a general practitioner, like many who are here to-night ; and we may all do something toward transferring the influence of their intelligence and their genius, and in applying the fruits of their labors to the practical daily duty of healing the sick ; and in spite of much disingenuous misinterpretation and foolish abuse we may be able to prove to the world that experimental pathology is in the very highest degree beneficent and philanthropic. For the first time we seem to have grasped a principle in the treatment, both preventive and curative, of a class of diseases which we have hitherto regarded almost with despair. Let us steadily work on the foundation which this principle supplies, the successful application of which must be attended with immense service to humanity and lasting honor to medical science.—*Brit. Med. Jour.*

SOME NEW DISCOVERIES IN REGARD TO ERYSIPELAS.

In a paper read before the Cincinnati Medical Society (*Lancet and Clinic*), Dr. Joseph Eichberg gives a resumé of a treatise on the etiology of erysipelas by Fehleisen, of Berlin, which treatise he regards as another step in the gradual perfection of our knowledge of the disease. He refers to the various theories of the causation which have obtained, beginning with Galen, who referred the cause to disturbances of the biliary secretion, and continuing down the line to Huter, who advanced the theory that the erysipelatous virus belonged to the class of micro-organisms. Subsequent investigations have confirmed the theory by demonstrating the presence of micrococci and bacteria. The author differs from Huter, who considers the virus to be small micrococci in active movement, while he lays special emphasis on the fact of their immobility.

Fehleisen's experiments succeeded in isolating the erysipelas micrococci and in propagating them by culture, producing in this manner in the course of two months, fourteen generations. In the manner of their growth they presented peculiarities which at once enabled him to distinguish them from the micrococci of pyæmia and other affections whose germs are morphologically identical with those of erysipelas. The inoculation of rabbits with these artificial culture fluids produced a disease absolutely identical with erysipelas. Patients in the hospital were also inoculated with identical results. In selecting patients for these experiments a double purpose was sought to be accomplished. Remembering the frequent mention in the literature of the subject, of the favorable influence exerted by a concurrent attack of erysipelas in cases of neuralgia, typhoid fever, acute rheumatism, chronic diseases of joints and various forms of syphilis, lupus and many neoplasms, five of the patients selected for the experiments were affected with morbid growths and two with lupus. In six of the seven cases erysipelas was promptly developed; the seventh case had had numerous previous attacks of erysipelas, the last occurring but three or four months previously, and was supposed to have thus established a tolerance for the virus. Without considering each of these cases in detail, it may be stated that the development of erysipelas in no case did harm, while in three the therapeutic effect was quite satisfactory. Such inoculations are, however, permissible only when hope of benefit from operative interference has passed.

Aside from their therapeutic effect, these experiments are worthy of consideration in deciding the question of the origin of erysipelas. All cases were types of pure erysipelas as determined by Bergmann, who examined them all in common with many of his colleagues of the Wurzburg clinic. In regard to the researches of Lukomsky, Billroth, Ehrlich and Tillmans, who found the micrococci in the lymphatics of the skin and subcutaneous fat, and in the blood-vessels, liver, kidney and substance of the heart, it may be safely presumed that in these cases there was a complication with pyæmia or lymphangitis or phlegmon; in the uncomplicated affection the micrococcus is found only in the lymphatics, which is characteristic of the affection. The spread of the disease does not occur, as in lymphangitis, along the course of the lymph stream, but the dissemination takes place in all directions, frequently against the direction of the lymph current.

With reference to the spread of the disease in any community, there can be no doubt that it is contagious, *i.e.*, transmissible from man to man by direct contact, through the use of instruments, etc., but this is not the only or even the usual method of its dissemination. On the contrary, no reasonable doubt can be entertained that the micrococci multiply and generate outside of the human or animal body. Moreover it is not an easy matter to produce an artificial erysipelas without resorting to the method of cultivation outside of the human body. Many experiments of direct inoculation from man to man have given negative

results, which proves that the danger of contagion from a person suffering with erysipelas is not very great. The bacteria, which have entered the body, disappear almost as quickly as they multiply, without ever reaching the surface, and thus having opportunity to act as the means of secondary infections. The micrococci of erysipelas would then very speedily disappear altogether were there not some soil in which they might develop, other than the human body. As pointing to such a conclusion, there may be cited the fact that in artificial cultures they multiply when cultivated upon potatoes, as well as upon coagulated blood serum or gelatin.

Another interesting feature of the experiments bears upon the question of immunity from second attacks. After a primary inoculation, seven persons were vaccinated; six were affected with erysipelas; the seventh patient had frequently been affected and had passed through his last attack a few months prior to the experiment. Of the six other successful vaccinations, two were repeated several times. The third case, successfully, on the 7th of October; subsequently on the 1st and 9th of November, unsuccessfully. In case No. 5 patient had erysipelas in December, 1881; on the 7th of October, 1882, she was successfully vaccinated with the culture virus; on the 9th of November, thirty-three days after this, the vaccination was unsuccessful. We may conclude from this that one attack of erysipelas confers an immunity of short duration from later attacks.

The author concludes his paper by reporting some experiments made with a view of testing the effect of two antiseptic agents upon the disease germs. The two agents were those used for the dressing of wounds in Bergmann's clinic, a one-per-cent. solution of corrosive sublimate and a three-per-cent. solution of carbolic acid. After exposing the germs on a platinum wire to the action of the carbolic acid for twenty seconds, no apparent effect was produced, for the artificial cultures developed as rapidly and extensively as before. An exposure of thirty seconds caused an imperfect and retarded development of the cultures; and an exposure of forty-five seconds destroyed them altogether. The solution of corrosive sublimate destroyed them much more quickly, an exposure of ten to fifteen seconds being sufficient to prevent their development on gelatin. As showing the value of antiseptic dressings, suggested by these experiments, the author cites the statistics of the surgical clinic of Bergmann, where, during a period of four and a half years, erysipelas occurred only in two cases treated with the antiseptic dressing, and he adds, this very limited number may be ascribed to some slight defect in the dressings; and, when it is remembered that erysipelas is of very frequent occurrence in Wurzburg, these figures show decidedly in favor of the antiseptic method. When it is further remembered that many cases of operations about the face and head, where the antiseptic dressing was not applicable, were, during the same time attacked with erysipelas, any additional proof seems unnecessary. The antiseptic dressing will, however, only prove efficient when its application has been preceded by careful disinfection of the wound and of surrounding parts; for this purpose strong solutions of carbolic acid answer best, as they penetrate somewhat into the tissues around the wound, without, at the same time, coagulating the albumen of these tissues; an objection which militates against the employment of corrosive sublimate.

As far as erysipelas is concerned, the labors of Fehleisen seem to decide conclusively a great deal that has hitherto been only speculation and surmise; and, with reference to completeness, are really more satisfactory than the valuable discovery of Koch which they so briefly follow. How far the future physician is to benefit by this work in the field of therapeutics it were possible to conjecture. It is the first time that artificial culture fluids have been successfully used for the production of disease in man, and the very success which has crowned these efforts will probably serve as an encouragement to many to follow in the path which the author has so brilliantly indicated. We can only hope for the sake of humanity and of our science, that those who may come after shall, like Fehleisen, bring to their work scientific acumen, clear observation, and, above all, over all, a sincere desire to relieve suffering and ameliorate distress. —*The Medical Age.*

THE HUMORS OF EXAMINATIONS.

(*From Chambers' Journal.*)

It is related of a rough-and-ready examiner in medicine, that, on one occasion, having failed to elicit satisfactory replies from a student regarding the muscular arrangements of the arm and leg, he somewhat brusquely said, "Ah! perhaps, sir, you could tell me the names of the muscles I would put in action were I to kick you!" "Certainly, sir," replied the candidate; "you would put in motion the flexors and extensors of my arm, for I should use them to knock you down!" History is silent, and perhaps wisely so, concerning the fate of this particular student. The story is told of a witty Irish student, who, once upon a time, appeared before an Examining Board to undergo an examination in medical jurisprudence. The subject of examination was poisons, and the examiner had selected that deadly poison, prussic acid, as the subject of his questions. "Pray, sir," said he to the candidate, "what is a poisonous dose of prussic acid?" After cogitating for a moment, the student, replied, with promptitude, "Half an ounce, sir!" Horrified at the extreme ignorance of the candidate, the examiner exclaimed, "Half an ounce! Why, sir, you must be dreaming! That is an amount which would poison a community, sir, not to speak of an individual!" "Well, sir," replied the Hibernian. "I only thought

I'd be on the safe side when you asked a poisonous dose!" "But pray, sir," continued the examiner, intent on ascertaining the candidate's real knowledge, "suppose a man did swallow half an ounce of prussic acid, what treatment would you prescribe?" "I'd ride home for a stomach-pump," replied the unabashed student. "Are you aware, sir," retorted the examiner, "that prussic acid is a poison which acts with great rapidity?" "Well, yes," replied the student. "Then, sir, suppose you did such a foolish thing as you have just stated," said the examiner; "you ride home for your stomach-pump; and on returning you find your patient dead. What would you, or what could you, do then?" asked the examiner, in triumph, thinking he had driven his victim into a corner whence there was no escape. "What would I do?" reiterated the student. "Do?—why, I'd hould a post-mortem!" For once in his life that examiner must have felt that dense ignorance united to a power of repartee was more than a match for him.

Incidents of a highly ludicrous nature frequently occur in the examination of patients, both by doctors and by students. A Professor on one occasion was lecturing to his class on the means of diagnosing disease by the external appearance, face, and other details of the patient. Expressing his belief that a patient before the class afforded an example of the practice in question, the Professor said to the individual, "Ah! you are troubled with gout!" "No, sir," said the man; "I've never had any such complaint!" "But", said the Professor, "your father must have had gout!" "No, sir," was the reply; "nor my mother either!" "Ah, very strange!" said the Professor to his class. I'm still convinced that this man is a gouty subject. I see that his front teeth show all the characters which we are accustomed to note in gout." "Front teeth?" ejaculated the patient! "Yes, retorted the professor; "I'm convinced my diagnosis is correct. You have the gout, sir!" "Well, that beats everything," replied the man; "it's the first time I've ever heard of false teeth having the gout! I've had this set for the last ten years!" The effect of this sally on the part of the patient, upon the inquisitorial professor and his students, may be better imagined than described.

Occasionally within the precincts of colleges and universities a rich vein of humor may be struck in a very unexpected fashion. On one occasion a professor, noticing that certain members of his class were inattentive during the lecture, suddenly arrested his flow of oratory, and addressing one of the students, said, "Pray, Mr. Johnson, what is your opinion of the positions of the animals just described, in the created scale?" Mr. Johnson was forced to say that "really he had no views whatever on the subject." Whereupon the professor, turning to a second inattentive student—who had evidently not caught Mr. Johnson's reply or its purport—said, "Mr. Smith, what is your opinion of the position of these animals in the classified series?" "Oh, sir," replied the innocent Smith, "my opinions exactly coincide with those just expressed so lucidly and clearly by Mr. Johnson?"

There are examiners and examiners, of course; some stern, others mild and encouraging. The student, who, when asked by a stern examiner what he would recommend in order to produce a copious perspiration in a patient, replied, "I'd make him try to pass an examination before you, sir!" had a keen sense of humor, which it is to be hoped the examiner appreciated. His answer was in keeping with the question which has been argued by us and by others, whether the whole subject of examinations, as at present conducted, should not be thoroughly overhauled and revised,

———

MICRO-ORGANISMS AND TUBERCULOSIS.

The April issue of *The Practitioner* is entirely devoted to a report to the "Association for the Advancement of Medicine by Research on the Relation of Micro-Organisms to Tuberculosis." The researches of Klebs, Toussaint, Schuller, Koch, and others are discussed historically and critically. The methods of Toussaint and Koch were made the subject of personal investigation, and visits to their laboratories at Toulouse and Berlin, with the results of a large number of physiological experiments, are likewise included in the report, which is further illustrated by some beautiful colored plates representing microscopic sections of diseased structures, and showing the grouping of the tubercle bacilli. Dr. Cheyne says, in conclusion,—

"A consideration of all the facts has led me to the conclusion that tuberculous processes in the lungs are due to the tubercle bacilli, and, so far as I know, to them only. By a tuberculous process I mean one where there is proliferation of epithelium, caseous degeneration of this proliferated epithelium, and inflammation round about, these changes being progressive. It has been supposed that inhalation of dust of various kinds may give rise to phthisis. That the inhalation of dust will lead to inflammatory changes is very likely, that it may lead to proliferation of epithelium which may subsequently degenerate is possible, but that the process will be progressive and extend beyond the seat of irritation is not probable. That the changes set up by the presence of gritty particles may, however, prepare the lung and render it a fit soil for the implantation of bacilli is very probable, and in this way a true tuberculous process may supervene, not due to the original gritty substances, but to the bacilli which came afterwards. I have only had the opportunity of examining three cases of potter's phthisis and one of miner's phthisis. In the former there was, histologically,

a true tuberculous structure, and there the tubercle bacilli were found. In the case which was labelled miner's phthisis, but the details of which I did not obtain, there was fibrous formation, the fibrous tissue being very vascular, and there was no appearance, histologically, of tuberculous structure, nor were any bacilli present.

"As to the intestinal ulcerations which often occur in phthisis, and which are supposed to be due to swallowing sputum, I have only examined two cases, and there I found tubercle bacilli in the wall of the ulcer bearing the same relation to epithelioid cells and caseous matter as elsewhere.

"As to heredity of tubercle, I would call attention to the case of the guinea-pig, which was highly tuberculous and which had an almost fully developed fœtus in its uterus (Experiment XVIII., p. 289). The fœtus and placenta were healthy and free from tubercles.

"It has often been urged that the milk of tuberculous cows is infective. This may be the case when the mammary glands become tuberculous; and the mode in which the bacilli might get into the milk is well illustrated by the appearances which I found in the kidney of rabbit No. 1. (Experiment XIV., p. 286.) There not only were bacilli present in the tubercular mass, they were also found in large numbers in the epithelium of the kidney-tubules, and in the interior of the tubules, both in the immediate vicinity of the mass and at some distance from it. I have not yet had an opportunity of examining an early tubercle of the kidney, but, from what I have seen I think it quite likely that the epithelium of the tubules may in some cases be the primary seat of the bacilli in the kidney, just as the alveolar epithelium is in the lung. In that case bacilli would be present in the urine not merely when there were marked tubercular masses in the kidney, but also where the disease was but slightly advanced, here again resembling the case of the lung. From analogy I suppose that the same is the case with the mammary glands, and that bacilli might be present in the milk even though the disease of the gland is not sufficiently far advanced to be noticeable."

IODINE BLISTERS IN TABES MESENTERICA.

In tabes mesenterica, Dr. Bouchut, of the Children's Hospital, recommends the application of blisters, or the tincture of iodine, upon the abdomen, and if ascites were present tapping should be employed without hesitation. The *regime* to be followed should be very severe—beef-tea, eggs, raw milk, and claret. If diarrhœa be present, enemas of borax, one drachm each time, should be given, and three or four teaspoonfuls of glycerine in the day, by the mouth. Bismuth, or phosphate of lime, would be very useful. Your correspondent tried this treatment in an apparently hopeless case, and a rapid recovery ensued. The disease was far advanced, and the child was abandoned by its ordinary medical attendant.—*Medical Press.*

TO ABORT A STYE.

Dr. Louis Fitzpatrick, who has recently returned from Egypt, where all kinds of eye affections are extremely common, writes to the *Lancet* that he has never seen a single instance in which the stye continued to develope after the following treatment had been resorted to: The lids should be held apart by the thumb and index finger of the left hand (or a lid retactor, if such be at hand), while tincture of iodine is painted over the inflamed papilla with a fine camel's hair pencil. The lids should not be allowed to come in contact until the part touched is dry. A few such applications in the twenty-four hours are sufficient.

SUBCUTANEOUS INJECTION OF QUININE.

The following solution when injected hypodermically has frequently proven of service in obstinate cases of neuralgia; it should be injected close to the painful point:

℞.	Quiniæ bromhydrat,	1 gram.
	Æther. sulphuric,	8 grams.
	Sp. vini rect.	2 grams.

M.

ANEURISM OF ANTERIOR COMMUNICATING ARTERY.

In presenting a case to the Medico-Chirurgical Society of Montreal (*Medical News*, March 3, 1883), Dr. Osler called attention to the fact of the frequency of aneurism of the cerebral vessels, and to the fact that many cases of apoplexy in young persons were caused by them. This was the eighth instance which had come under his observation in the past few years.

SPECIMENS OF RENAL CARCINOMA.

Before the Midland Medical Society (*British Medical Journal*, March 24, 1883).

Dr. Windle showed a large deposit of carcinoma in a left kidney, secondary to scirrhous mammæ of two and a half years' duration, the patient being a female, aged 62. This was the only secondary deposit existing. After removal of the breast, very little urine was passed, and none at all the day preceding death. The fatal termination occurred six days after the operation.

THE CANADA MEDICAL RECORD,

A Monthly Journal of Medicine and Surgery.

EDITORS:

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SUBSCRIPTION TWO DOLLARS PER ANNUM.

All communications and Exchanges must be addressed to the Editors, Drawer 356, *Post Office, Montreal*

MONTREAL, JUNE, 1883.

SUBINVOLUTION OF THE UTERUS.

A very valuable lecture on this subject by Dr. Clinton Cushing, of San Francisco is to be found in the *Med. News*, June 2, 1883. He considers premature assumption of domestic duties, after parturition as one of the most frequent causes of this unfortunate condition, and he formulates the following sound advice to physicians:

"If it is possible to do so, I know of no better investment of time and money than for a woman who is raising a family to devote at least a month following her delivery to rest and quiet, and as free from excitement of any kind as may be. Unless she is confined to her bed by poor health, it is the only opportunity a mother of a family has to remain quiet longe nough to get really rested; and I would advise you to inculcate, in the most thorough manner, the minds of your puerperal patients with the idea that a full month must be given up to rest and recuperation after delivery, and that a portion of each day after getting out of bed must be spent upon a lounge or couch for several weeks. Of so much consequence do I consider this advice, that I would again urge you to use all your eloquence to show your patients the advantages to be derived from a month's bodily and mental rest following confinement.

LANCING THE GUMS OF CHILDREN.

After stating that it is proper to lance the gums when they are swollen and either red from inflammation or white from pressure of a tooth *coming*, Dr. Chase, in the *Mo. Dental Journal*, goes on to say:

"The operator should *know* whether a tooth is pressing on the gum, and trying to make its way out. In this case, *cut down to the new tooth*, until it is felt under the lancet. For incisors and cuspids, a straight line cut. For molars, a crosscut.

"How *not* to do it: Not with a child sitting up, in your lap, or any one's lap.

"*How* to do it: Let the operator and "nurse" sit close together, facing each other. The child is laid down face upwards; the head in the operator's lap, the feet in the "nurse's" lap. The nurse holds the limbs of the child quietly, so that it may not interfere.

"With the left hand the operator takes the jaw between his fingers, and slowly and firmly does the cutting.

"There is no false cut. The child is still."

TREATMENT OF GONORRHŒA.

A rather large number of American, German, French and English physicians have—as we see by reading through the many different foreign and domestic medical journals—of late been reporting very successful results in the treatment of gonorrhœa by the *yellow* oleum santali. We learn that the remedy invariably puts an end to the discharge within two days, but to prevent a relapse it has to be continued for two weeks longer. From 15 to 20 drops given three times daily is the usual dose which may be administered on sugar or in gelatine capsules.

OXIDE OF ZINC IN CHRONIC DIARRHŒA.

M. Gubler has found it most useful in the diarrhœa of phthisis, and whenever ulceration of the uterus is suspected. He gives it in powders in the following form: Oxide of zinc, thirty grains; bicarbonate of soda, ten grains; in four powders two or three daily.

TINEA VERSICOLOR.

Tineaversicolor or *Liver Spots* is an exceedingly common affection, and one that causes much annoyance, since the patient frets at having this blemish on his skin. To cure it, Dr. George H. Rohé (*Med. Record*, June 2, 1883,) recommends a lotion of hyposulphite of sodium, half a drachm to the ounce of water. The patient is directed to take a bath once a day, using soap freely. After the bath the affected spots are to be mopped with the parasiticide lotion. In a week the discoloration has usually disappeared. The remedy should be continued a week or two longer to prevent relapse. Dr. Rohé says it is surprising to what an extent cases of tinea versicolor are treated for syphilis, hepatic derangement, or similar supposed affections of the internal organs. Patients are

sometimes compelled to take mercury or potassium iodide for months, under the supposition that they suffered from syphilis, when the only trouble was that just described, which, when properly treated, yielded to local remedies alone in the brief space of two weeks.

PERSONAL.

Dr. Fenwick of London, Ont., brother of Dr. Fenwick of Montreal, has been appointed to represent the Medical Faculty of Western University, in the Ontario Medical Council.

Dr. Stephen, (M.D., McGill, 1880) has been elected on the Montreal Dispensary staff in place of Dr. Macdonell, resigned.

Dr. O. H. E. Clarke (M.D., McGill, 1870) has removed from Cohoes, N.Y., and located in St. Louis, Mo.

Dr. Edmund Christie (M.D., McGill, 1882) son of Dr. Christie of Lachute, has settled in Chicago.

Drs. McLean and Duncan (M.D., McGill, 1881) and lately resident medical officers at the Montreal General Hospital, have entered into partnership and commenced practice at Fergus Falls, Minn.

Dr. Chandler (C.M., M.D., Bishops, 1881, and Wood Gold Medalist) was in Montreal early this month on a visit. Dr. Chandler has been elected (after examination) surgeon to the Charity Eye Hospital of Boston. He intends devoting his attention entirely to ophthalmology.

Dr. Robert J. B. Howard, son of Dr. R. P. Howard of Montreal, has passed the primary examination for the fellowship of the Royal College of Surgeons, England.

Dr. McLean, formerly of Kingston, Ont., and lately of Ann Arbour, Mich., has removed to Detroit, having been appointed surgeon to the Michigan Central Railroad. He has resigned his Chair of Surgery in the Universityof Michigan.

Dr. T. A. Rodger, Point St. Charles (M.D., McGill, 1866) has been appointed Medical officer to the Grand Trunk Railroad in place of Dr. W. E. Scott, deceased. We congratulate Dr. Rodger, and assure him that his numerous friends have heard of his appointment with great pleasure.

Dr. Houston (M.D., McGill, 1881) has become a Benedict, and was in Montreal on his marriage trip early in June. He is practicing at Cohoes, N.Y.

Dr. McNiece (M.D., McGill, 1867) has located in Montreal.

Dr. Thompson (M.D., McGill, 1881) now stationed at Matawa, as one of the Medical officers of the Canadian Pacific Railroad, was in Montreal for a few days this month. He reports a considerable surgical practice in his division.

CORRESPONDENCE.

To the Editor MEDICAL RECORD.

SIR,—May I draw the attention of your readers to the very large sale in the Dominion of what is technically termed Commercial Citrate of Iron and Quinine. It appears to me very absurd for physicians to purchase a drug only because it is cheap, and even some hospitals are guilty of buying the cheapest drugs on the market. If there is one place more than another where the very purest qualities of everything pertaining to drugs should be found, most assuredly it ought to be the hospital, so much depended upon by the profession for accurate and exhaustive therapeutic experiment.

This cheap citrate of iron and quinine, containing only some 5 per cent. of quinine and in some cases no quinine at all, is evidently sold to somebody; can it be possible that physicians who give their own drugs to their patients, buy it? I scarcely think it possible that any druggist in Montreal would be so dishonest as to dispense prescriptions with it.

Citrate of iron and quinine is an article of the British Pharmacopœia and it is this preparation which is intended when prescribed. Even the product of the very best makers, such as Howard and Huskisson, appears, according to the best analysts, such as Gerard, to be usually below the standard—not intentionally so, but perhaps owing, as Mr. Wood says, to a change of composition when exposed to the sun's rays, or it may be that chemical analysis is a little at fault in determining the precise quantity of the alkaloid present. Be that as it may, there are articles on the market containing not more than 1 or 2 per cent. of quinine. Such preparations should never be purchased, and only those should be allowed in any drug store which bear the maker's name and guarantee label.

Let us hope that spurious citrates are not allowed through the Custom House at a lower rate of duty than the correct article. It seems to me every ounce of citrate of iron and quinine passing through the Customs should be understood to be the true officinal article and charged accordingly.

Now that we have an experienced chemist and druggist as appraiser let us hope he will look out this matter.

Truly yours,

HENRY R. GRAY.

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THE BIRTHPLACES OF YELLOW FEVER.

(*Translated from the Spanish*).

By WOLFRED NELSON, C.M., M.D.,

Member of the College of Physicians and Surgeon, P.Q. Late Assistant Demonstrator of Anatomy Medical Faculty of Bishop's College, Montreal ; Late Physician Accoucheur to the Female Home ; Late Consulting and former Attending Physician to the Montreal Dispensary ; Late Member Board of Health and Quarantine Panama, South America, &c., &c., &c.

Dr. Domingo Freire, of Rio de Janeiro, who was commissioned by the Brazilian Government to examine into and report on the subject of yellow fever, has presented the following to his Government, touching the birthplaces of yellow fever. It was translated from the Portugese language into Spanish, for the use of the Chilian Government in Peru. As the subject is entirely new it may interest the many readers of the CANADA MEDICAL RECORD. The following is a literal translation :

"In the discharge of the commission that was confided to me by the Government I have met with facts of great interest touching the pathology and therapeutics of yellow fever, and which will be the subject of a separate report to which I shall specially devote myself. I consider it my duty, however, to make known, as soon as possible, a circumstance of great interest in connection with public hygiene.

"During a visit that I paid to the Cemetery of Jurujaba, where all are buried who die in the Marine Hospital of Saint Isabel, I gathered a handful of earth at a depth of one foot from the surface, over the grave of a person who had died, about a year previously, of yellow fever. This earth did not differ in color or odor or any external feature from the surrounding earth; but by examining a small quantity with a microscope magnifying 740 diameters, taking the usual precautions to avoid error, I found myriads of microbes, exactly resembling those met in the vomited matters, urine and blood, and other organic liquids from the bodies of those attacked by yellow fever, viz.,—the cells of *cryptococcus xanthogenicus* in various stages of growth, from the size of a black speck, difficult to recognize in the field, up to round corpuscles, more or less large, strongly reflecting light, some being grey, while others were black, and surrounded by a fringe or areola of that color. Many of the organisms moved spontaneously. There were yellowish masses marked by granulations that came out clearly in the field, likewise masses made up of the coloring matter of the cells; we also saw specks that were entirely black, being the remains of the *cryptococci*.

"I also observed vibrioles. They moved with rapidity. These observations were verified in all their details by my assistants, Messrs. Chapot, Augustus Cesar, and Carminhva, showing clearly that the germs of yellow fever perpetuate themselves in cemeteries, and that cemeteries are birthplaces for the evolution of new germs, destined to devastate our city (Rio de Janeiro).

"Through the pores of the earth the germs escape and reach the atmosphere; others are carried by the heavy rains, so frequent among us, into the streets and squares, and there meet with conditions favorable to their evolution, and give rise to epidemics during the summer, the latter season being the most favorable for their appearance and spreading. The existence of the microbes of yellow fever is completely in accord with the observations made by Pasteur, touching the subject of malignant pustule.

"I take the liberty to recommend these facts to hygienists. It seems to me that, as a provisional measure, the cemeteries now existing should be removed, and placed as far away as possible from centres of population, where the prevailing winds cannot take up and scatter the different seeds of the microbes. As a radical and final measure the practice of cremating the bodies of those dying during epidemics would be the surest way of stamping out the poison and the epidemics that desolate year by year, with more or less intensity, the flourishing centres of our population.

"If every dead body is a storehouse containing millions of these organisms, the product of disease, imagine what a cemetery must be, in which new *foci* of disease are formed around every corpse. The imagination is incapable of estimating the literally infinite number of these microbes that multiply in these spots. Amid the silence of death, these worlds of organisms, invisible to the naked eye, are constantly working to make new poison for new victims, destined to serve them with food and for the fatal perpetuation of their species."

The above is all that has appeared in print, so far, of Dr. Domingo Freire's researches; when new material appears, I shall translate and forward it. The subject to us here is one of the greatest importance, as yellow fever is endemic, unfortunately, on the Isthmus of Panama, and its vicinity. The researches and observations made by Dr. L. Girerd, Surgeon-in-Chief of the Interocean and Canal Company, stationed at the Company's Central Hospital here, will form the subject of a future letter. He has examined the blood, etc., of a number of yellow fever patients, and has conducted a great many experiments by propagating the germs from one series to another successfully.

PANAMA, SOUTH AMERICA,

June 16th, 1883.

TREATMENT OF YELLOW FEVER.

(*Translated for the* CANADA MEDICAL RECORD).

By Dr. WOLFRED NELSON, Panama, South America, June, 1883.

The following is a brief summary of the treatment of yellow fever in Peru. It was introduced there in 1868 by Dr. Wilson, an English graduate in medicine, when he was physician to the English Hospital in Callao. During the fearful epidemic of yellow fever in that city, in 1868, his success was something remarkable,—only three *per centum* of his patients died.

The report recently published in Peru, in the language of the country, Spanish, goes on as follows:—"When the patient feels that his skin is dry, and that he has a headache (they being infallible symptoms of the disease) he should be made to perspire profusely. The best way to produce the perspiration is by means of hot air. To do this, place a small spirit lamp, or a coal oil lamp, under a chair having a solid seat, let the patient sit on the chair perfectly naked, but well covered with a blanket; let him remain until profuse perspiration commences. Then put him in bed, where he should continue perspiring freely for one or two hours. Rectal injections should be given immediately, containing oil of Palma Christi, with soap suds and a small quantity of spirits of turpentine, the injection being warm. This treatment should be continued three or four days, and should always be followed by profuse perspiration and emptying of the bowels; following the above give three or four doses of four grammes each of sulphate of quinine at intervals of four hours exactly; then for two or three days more give six to ten drops of spirits of turpentine, in gum water, or with the white of an egg.

Further it has been noted, that the greater part of those who have had yellow fever have been constipated previously. As a precautionary measure, the bowels should always be kept open. The sun and dew should be avoided, stimulants should be used in moderation. No fruit of any kind should be eaten.

The best preventive that the local authorities can impose is to prohibit the sale of all fruits."

Society Proceedings.

MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

Stated Meeting, April 27th, 1883.

[Continued from our last.]

Puerperal Eclampsia.—Dr. Armstrong read a paper on this subject, reporting three cases. In the first case, a multipara, a fortnight before her delivery complained of the three symptoms regarded by Chaussier as premonitory indications of eclampsia, viz., cephalalgia, disorder of vision, and epigastric pain, together with œdema of feet, ankles and hands, with puffiness of eyelids. Although diuretics and occasional purges were given, a convulsion came on soon after labor began. Chloral Hydrat. was given every hour in doses of ℈i. After three or four doses the woman had a second convulsion, when chloroform was administered, and the first stage of labor being completed, the forceps were applied and the child delivered. The hæmorrhage following the birth of the child was considerable, requiring to control it a good deal of kneading of the uterus, and the application of ice to the cervix. The child was still-born, but the mother made a good recovery. In the second case, primipara, the convulsions first appeared a few minutes after the completion of a normal labor lasting fourteen hours. The comatose condition, which obtained after the first convulsion, persisted and deepened in spite of treatment, and the patient died sixty-four hours after she was delivered. No paralysis of face or other parts could be made out. The urine was highly albuminous. At the autopsy extravasated blood was found covering the superior surface of the brain, and dipping down in the sulci. Also a large clot, which measured four centimeters by four centimeters, was found in the substance of the left middle lobe of the cerebrum. It was situated in the parietal section of Pitres. The kidneys, microscopically, were found to be granular, and the veins were dilated. This dilatation of veins was found, in microscopic sections, of different tissue by Dr. Wilkins, who kindly examined them. The third case is of interest principally from the fact that gestation went on twenty-two days after the occurrence of two well marked convulsions. Labor then came on, and she was delivered of a living healthy child, without any recurrence of eclampsia. During the three weeks interval between the eclamptic seizure and delivery, chloral in 3 i doses was administered per rectum, as soon as any twitching of the muscles of the arms or disorder of vision with headache and epigastric pain appeared. This case shows how we can carry on a case until the completion of gestation, by careful watching, appropriate treatment, even after two puerperal convulsions have occurred. The fate of the children in the first and third cases favors the idea that the death of the child is due to carbonic acid poisoning, it, in its turn, being due to the interference with respiration of the mother during the convulsive seizures rather than the toxæmic state of the mother's blood.

Dr. Armstrong stated that the digitaline used was prepared by Parke, Davis & Co. of Detroit. He thought the dose of gr. ¼ not too large. In reply to Dr. Wilkins he thought that if the condition of the mother's blood killed the child, then the child in the third case should have died, for in this case for three weeks before the birth of the child the mother presented symptoms of profound uræmic poisoning. Her urine never containing less than 30 per cent. of albumen. But the child was born alive and well. The only time the fœtal heart was weak was the day of the eclamptic seizures. The fœtal heart sounds being stronger the next succeeding day.

Drs. Alloway and Cameron having raised the question of etiology, Dr. Armstrong stated that his impression was that puerperal eclampsia had a predisposing and an exciting cause. The predisposing cause might be, according to the theory of Dr. Barnes, an excessive nervous development, and an increased development of the spinal cord; or, according to the Traube-Rosenstein theory, increased aortic tension, followed successively by œdema of the brain, compression of the cerebral vessels, and acute cerebral anæmia; or the theory supported by Andral and Gavarret, that the blood of all pregnant women was hydræmic; or the theory of Kussmaul and Linner, of cerebral anæmia; or the theory of Braun that uræmic poisoning, due to Bright's disease of the kidneys, was the cause. Frerichs attempted to prove that the poison was due to ammonia carb., formed by the decomposition of the urea. Spiegelberg suggested that a reflex contraction of the vessels might cut off the blood supply to the kidneys, due to a peripheral stimulus. And Frankenhauser has demonstrated a direct connection between the ganglia of the kidneys and the nerves of the uterus through the sympathetic.

Or the predisposing cause might be any toxæmia or leukæmia. Probably all these theories apply in certain cases, but the exciting cause seemed to be some peripheral irritation, as held by Ohr and others.

Dr. Armstrong thoroughly believed in venesection where there was a distended right heart, and also in cases of high arterial tension, with a hard incompressible pulse, though the surface might be pale. Broadbent had proved venesection to be of the greatest value in this last class of cases. The use of large doses of morphia was undoubtedly useful in selected cases. But he had found bromide and chloral give very satisfactory results as a rule. In regard to chloral killing the child, there was no evidence to show that such ever was the case. On the contrary, chloral was often freely given in tedious prolonged first stages of labor without any injurious effect whatever upon the child.

Dr. Wilkins advocated inducing premature labor in cases where the convulsions appeared to be from uræmia or retention of whatever salt it is which poisons the mother, as he believed it poisoned the child also.

Dr. Alloway remarked that the etiology of puerperal eclampsia was interesting, from the different views entertained by eminent writers. He thought the theory of Lever—reported in the Guy's Hospital Reports of 1842—was the one generally accepted at present. Lever had shown that the urine in eclampsia was always highly albuminous, and that pathological changes in the kidneys, corresponding with those of Bright's disease, were frequently discovered. From these facts he contended that eclampsia was caused by the retention in the blood of urea and other constituents of the urine which it was the duty of the kidneys to excrete. The chief objection urged against the acceptance of this theory of uræmic intoxication was that there were patients suffering from chronic Bright's disease who were not attacked with convulsions during pregnancy or parturition. This objection was, however, easily met by the explanation, that if this chronic disease be of long standing the remaining healthy parts of the kidney will still secrete sufficient urine to prevent poisoning, and that eclampsia depended upon uræmic poisoning in consequence of deficient or total suppression of renal secretion. Dr. Alloway also spoke of the well-known Traube-Rosenstein theory, which claims that eclampsia appears when the arterial blood pressure in a highly hydræmic subject is suddenly increased. In this case acute œdema of the brain is produced, the exudations of serum causing anæmia by compressing the blood vessels. If this condition was confined to the hemispheres it was thought coma would be produced, and if it extended to the motor centres we would get convulsions. The principal objections to this theory were, however, that many young, healthy robust women became eclamptic, and that many hydræmic patients enjoyed an immunity from convulsions. Dr. A. spoke of another class of cases in which the albuminuria is absent during the entire duration of the disease, or only shows itself in very minute quantity for a very short period. Such cases had beeh called "eclamptiform attacks," caused by reflex irritations of vasomotor and spasmodic nerve centres by a peripheral excitation. According to Brown-Sequard the sciatic nerve plays a most important part in the production of these artificially excited epileptic attacks. Cases have been reported where an over-distended bladder in protracted labor had caused convulsive attacks; also a retained placenta has been accused of being the probable cause. Dr. Alloway drew attention to the recent treatment of puerperal eclampsia by very large doses of morphia, Dr. Glark, of Oswego, being, he believed, the first to practice it. In Dr. Clark's article in the *American Obst. Journal* of July, 1880, upon this subject, he recommended gr iss and gr ii doses to be administered hypodermically, and repeated on occurrence of another fit. Clark also states elsewhere that it would be absolutely safe to give as high as three grains in same way. Dr. Alloway had used over grain doses in two cases in association with Dr. Rodger with very gratifying results. He had also used pilocarpine, but was not much impressed with it.

Dr. Rodger said he had seen quite a number of cases of puerperal eclampsia, and believed venesection, combined with the hypodermic use of morphia, to be the best treatment. He had been disappointed with chloroform and chloral in these cases.

Dr. Trenholme said the second case reported by Dr. Armstrong possessed some features of special interest. It showed that convulsions in the mother did not destroy the life of the unborn child. It was a question in his mind if the death of a child in the uterus was not generally due to detachment of the placenta, caused by the spasms of the uterus, rather than a vitiated state of the mother's blood. In rare cases it might be otherwise. As to treatment—this would vary with each case—no definite

rule could be followed. If the woman was plethoric and strong, blood should be promptly and largely abstracted; and then followed by a large dose of morphia, or bromide of potass, and chloral. In all cases chloroform was invaluable, and in some cases enough of itself. Where bleeding was not indicated, morphia in even gr. ii doses was good in its result. As to hastening delivery this would depend upon the results of the uterine contractions—if they caused the convulsive spasms, it was clearly our duty to empty the uterus and set it at rest. If otherwise, wait for natural delivery.

Dr. Roddick believed he had several times used chloral with benefit. Has ble t ut would only do so in suitable cases, such as those indicated by Dr. Trenholme. He said that Dr. Fuller, about eight or ten years ago, was the first to advocate the use of morphia hypodermically in puerperal convulsions; most of the members of the Society opposed him strongly on theoretical grounds. He (Dr. Roddick) on this occasion, being one of those to denounce Dr. Fuller's treatment. Now he was convinced of the usefulness of morphia hypodermically used in these cases.

Dr. Stephen had lately seen chloral in large doses combined with inhalation of chloroform act well. He advocated using the chloral when premonitory symptoms appear.

Dr. Cameron said that although the majority of these cases are renal in origin, yet convulsions frequently occur where careful examination fails to detect any appreciable signs of renal disease. Sometimes profound anæmia, sudden shocks or frights, or an over-excited condition of the nervous system, seem to precipitate the attack. He detailed a case where convulsions occurred in a nervous, hysterical patient, profoundly anæmic, after a severe attack of diphtheria; no symptoms of renal mischief being found either before or after confinement. He did not agree altogether with those who advocate the induction of premature labor, or the rapid completion of delivery by forceps or turning, when a convulsion occurs before the birth of the child. In many cases such practice does more harm than good, causing still greater irritation, and intensifying the convulsive action. Where the os is well dilated, or at least soft and dilatable, operative interference may be permissible; but where the os is hard, rigid and undilated, it is better to control the convulsions, and wait till the parts are in a more favorable condition. With regard to treatment, he believed that while venesection is apphcable to the robust and plethoric, especially where renal mischief exists, many patients can ill afford to lose blood. Where venesection is practiced, there is greater tendency to subsequent absorption of septic matters. He considered the best treatment for the majority of cases to be morphia, in sufficient quantities to control the convulsions (the heroic doses advocated by some being usually unnecessary,, followed by chloral and potass. bromid.

Dr. Wood had recently used venesection, but his patient was afterwards troubled with anæmia, which caused her to lose her milk.

Dr. Osler said in Dr. Armstrong's second case death was due to extravasation in the brain, and that this was a cause of convulsions sometimes.

Dr. Kennedy had seen a good many cases of puerperal convulsions, in all of which uterine contractions existed, and were the immediate cause of a spasm. The os was in all cases dilatable. Had used and found useful chloroform, chloral, bromide of potassium, and hypodermics of morphia in large doses. Believed venesection valuable prior to delivery of the child. As a means of blood-letting he encouraged the flow at delivery by giving chloroform and afterwards ergot to ensure good contraction, and so stop loss. He agreed with Dr. Trenholme that the death of the child was due to separation of placenta by the spasmodic contraction of the uterus. Had delivered epileptics without their having convulsions.

Dr. Campbell related a case where convulsions came on between the 7th and 8th month; he bled and the spasms ceased until end of ninth month, when they returned; he now applied forceps and delivered safely. Had confined her several times since without any trouble.

Stated Meeting, May 11th, 1883.

THE PRESIDENT, DR. KENNEDY, IN THE CHAIR.

Chronic Papular Skin Eruption.—Dr. Gurd exhibited a boy, aged 10 years, suffering from this disease, most marked about the wrists and knuckles. The boy was one of a family of five, all of whom are affected, the servant alone remaining free. All suffer great itchiness at night after getting to bed. Treatment appeared to be useless. Many of the members thought it to be itch. Dr. Gurd brought the case for diagnosis, but did not think it to be itch, as no furrows were present, and the progress of the disease was not like scabies.

Muscular Atrophy.—Dr. Wilkins brought before the Society a man, aged 21 years, who was under his care in the Montreal General Hospital, affected with muscular atrophy, limited to the upper arms and thighs. The muscles of the fore-arms and leg are well developed, and presented a remarkable contrast to the wasted appearance of upper arms and thighs. There are no disturbances of sensation, but with the wasted appearance is associated more or less complete loss of power in the affected muscles. Patient was able to walk by a sort of shuffling movement; could mount the stairs, but only with assistance, and when kneeling or seated on the floor can rise only by grasping some support, such as a chair, to aid his legs by the use of hands and arms. In this condition his one elbow (the right) must be raised above shoulders; the left elbow being held firmly on left knee. Patellar tendon reflexes are absent. The plantar reflexes are diminished. Faradic excitability is absent in muscles of thigh and front portion of upper arm. No bladder disturbance; no muscular tremors; nor does he complain of pain. Patient refers his trouble to a fall which he had about three years ago. He fell on his buttocks from a height of ten feet, after which time he noticed himself gradually becoming weaker. About a year subsequently he had another fall while carrying a heavy weight on his head. The lesion Dr. Wilkins considered to be strictly limited to the anterior cornua of the gray matter, and to only a few groups of ganglion cells, and histologically to be exactly the same as those in *anterior poliomyelitis* of children. The course of the disease and the grouping of the muscles affected, however, he considered presented no similarity to that affection; nor did feel inclined to associate it with *progressive muscular atrophy*, owing to the absence of tremors and the perfect development of all the muscles of legs and feet and forearms and hands.

Pernicious Anæmia.—Dr. Osler exhibited the spleen and bone marrow from a patient who died in Hospital. She was 60 years of age, profoundly anæmic, with lemon-colored skin. Examination of blood during life showed irregular ovoid and baloon-shaped red corpuscles; also many microcytes. No Schultze's granules. P.M.—The microscope revealed the marrow to be rich in lymphoid cells—that from the vertebræ had abundant red corpuscles, nucleated red blood corpuscles and also microcytes. Spleen, which was not enlarged, had an extraordinary number of microcytes, the mode of origin of which was probably by buds from ordinary cells. Dr. Osler had watched this take place in three cases of this disease. There was atheromatous disease of lower abdominal aorta, the bifurcation was bony, and ulcers were found in the right common iliac. Dr. Osler said this was the oldest person in whom he had found Pernicious Anæmia.

Physometra.—Dr. Ross gave the following particulars: Was sent to attend a woman in labor; was told she had had a rigor some hours previous. Found she had fever and rapid pulse. Abdomen much distended, not much pain, but complained of distressing feeling of tension. Percussion over uterus was as resonant as the stomach. Said did not feel movements of child. Diagnosed dead fœtus and uterus filled with gas. Patient was delivered same night. It was a breech case. Had some difficulty to get child through, as its abdomen was filled with gas also; had to use a fillet. With each contraction of uterus detonations of gas and gurgling took place. As the head was delivered, most frightfully offensive gas came away. The child was much decomposed. Had never seen a similar case, and why so in this case, or why not oftener seen when the fœtus dead, he could not say. Patient recovered fully. No disinfectant was used at any time.

Dr. Roddick read a report of two cases of *Purpura Hæmorrhagica*, ending fatally, of which the following is a brief extract:

Case I.—Early on the morning of Sept. 21st, of last year, I was called to see a child, aged 7 years, said to be suffering intense pain in one eye, which was also swollen. I learnt on the way that the little girl, who had just recovered from an attack of scarlet fever, had been brought from Quebec the day previous, and appeared to be pretty well, but on going to bed was noticed to be feverish, and had vomited. The mother was aroused about midnight by the cries of the child, and noticed immediately that the right eye was considerably swollen and the lids ecchymosed. I found the upper lid especially enormously distended with blood, while on the cheek was a discoloration of the same nature. She had not passed urine for some hours, if at all during the day. Pulse weak, but not rapid; temperature was not taken. Ordered iced cloths to be applied to the ecchymoses, and internally, gallic acid, with iced milk as food. 8 *a.m.*—Ecchymoses previously noted not increased in size, but others have

appeared over the body and limbs. Urine passed is found to be almost pure blood; slight epistaxis; no fever; pulse weak. Dr. R. P. Howard saw the case in consultation with me during the day, but in spite of the most strenuous efforts on our part, the patient rapidly sank, and died within twenty hours of the time I was first summoned. An autopsy could not be obtained.

Case II.—Mrs. —, a widow in fair circumstances, aged 45, mother of six children, the youngest 10 years of age, consulted me for the first time on Feb. 26th, of this year, for a troublesome nose-bleeding. She had always enjoyed good health; menses regular; bowels in good order, but considerable flatulency and other dyspeptic symptoms. She stated that her teeth had been bad for some months, and on that account she seldom ate meat or other food that required much mastication. Ordered her suitable tonic treatment, and recommended an astringent douche for the epistaxis. She returned in about a fortnight, not much improved in general health, although the epistaxis was better. She now stated that she was spitting blood. On examination of the mouth, noticed a remarkably spongy condition of the gums, which bled on the slightest pressure. Suspecting the nature of the case, had the body examined, and found three or four ecchymotic spots, of the size of a sixpenny piece, on various parts. Ordered ice for the gums, and a strong solution of tannin, with gallic acid and ergot in large doses, internally; the food to be of the most nourishing and concentrated kind.

March 15th–18th.—Patient weak and blanched; the bleeding from the gums continues; requested Mr. McGowan, dentist, to see the case, with a view to having some pressure applied to the gums. At my suggestion, two loose teeth in the lower jaw were removed, and the bleeding from around them, which was excessive at times, was subsequently kept under control. Perchloride of iron was applied freely, and a cast of the gums was taken and adjusted so as to exert pressure. Vomiting and abdominal pain became now troublesome symptoms, and demanded special treatment. The spots of extravasation increased in size and number, appearing especially on the lips, eyelids, chest, buttocks, thighs, and upper arms. Up to this time there had been no blood in the urine; the stools were noticed to be black, but that may have been from the iron employed locally. Turpentine was subsequently administered in ten minim doses. As the vomiting persisted, the food was introduced *per rectum.*

March 21st.—The patient died this evening, no change for the better having occurred at any time during the past two days. Drs. Fenwick and Howard saw the patient with me, and each gave a most unfavorable prognosis. During the last few hours of life, the urine, which was very scanty, contained a trace of blood. The patient died of asthenia.

Empyema, Discharging Through Lung, Recovery.—Dr. Osler related the following particulars of this case: Man admitted into hospital under his care with typhoid fever. During convalescence found dullness at base of right lung, which a week later reached to spine of scapula. Effusion well marked; with hypodermic syringe drew off about 20 minims of pus. Waited for a week before treating with canula, and when about to do so found him spitting pus in large quantities—as much as 10 to 15 ozs. in the day. Physical signs became less marked, dullness diminished, moist sounds over that base; resonance not yet natural. Pus not fetid. Diagnosed erosion of pleura and soakage of pus through lung tissue in the bronchi. There was no pneumothorax. Dr. Osler said that the late Dr. R. L. MacDonnell of this city was, he believed, after Hippocrates, the first to notice the occurrence of perforation into the lung in empyma, and recorded seven or eight cases. Traube in 1871–72 claimed to be the first, but was mistaken. Traube was fortunate in having a post mortem on one of his cases where the pus was seen soaking through the lung tissue.

Dr. Ross mentioned three cases of complete cure of empyema by erosion of pleura and soakage which had come under his care.

Dr. Wilkins believed in operating early in cases of empyma, had had good results from excising about two inches of a rib.

Drs. Molson and Gardner had each seen a case similar to Dr. Osler's.

Pyometra.—Dr. Gardner gave the following particulars: Patient, aged 60, complained of pain in hypogastrium; was losing blood and an ichorous fluid from the uterus; had good health till year previous. Uterus was large; probe entered through ragged tissue into uterus 3½ to 4 inches. Nothing but blood coming away; put in a tent. Was inclined to think the case one of malignant disease. On removing tent next day, a teacupful

of pus, not fœtid, was discharged. The curette brought away granulations from the cervix. The cavity was smooth. The nature of the granulations was obscure. The uterus was washed out with iodine lotion. Patient got perfectly well, and has had no return of the disease.

Dr. Osler mentioned having met "post mortem" with three or four cases of uteri filled with pus, and having occlusion of inner os.

Progress of Medical Science.

A LECTURE ON THE TREATMENT OF ANGINA PECTORIS.*

By Professor Germain See.

Physician to the Hôtel Dieu; Member of the Faculty of Medicine; Member of the Academy of Medicine, Paris.

* Translated, with Professor Sée's permisson, by E P. Hurd, M.D., Newburyport, Ma.s.

Gentlemen:—Before instituting the treatment of angina pectoris, it is necessary to bear in mind that it may be only a transitory phase of heart disease, destined ere long to give place to the habitual symptoms of a regular cardiac affection. Angina pectoris is not, then, *per se*, always a cause of alarm, even when the attacks seem to be of a typical character. As it is impossible to predict a temporary duration of the malady, it is the duty of the physician, both during the paroxysm and in the interval, to act as though the return of the paroxysms and their attendant danger were inevitable. Above all, the cause should be sought for.

Treatment based on Ætiological Considerations.—If angina pectoris be due to a poison, it would seem to be a simple matter to prevent the attacks by suppressing the cause.

As for those anginas which have their origin in the abuse of tobacco, the remedy is obvious enough. It must, however, be borne in mind that angina pectoris from tobacco is a rare thing. Tobacco determines intermittences, arythmia, etc., much oftener than the painful affection under consideration, which, when the result of smoking, is due to the slow action of the nicotine poison on the coronary arteries.

Angina of alcoholic origin does not yield to suppression of the cause. It is a sure sign, when spirit-drinkers have attacks of angina pectoris that arterial lesions already exist—that is to say, endarteritis of the coronary vessels, as well as degenerations or scleroses of the myocardium. It is vain to suppress alcohol in these cases; the evil is done, and is almost always irremediable. Gouty angina, which the Germans regard as the typical form, even identifying angina pectoris with gout, is in reality a cardio-vascular lesion, and resists treatment of the diathesis, just as alcoholic angina persists in spite of the suppression of the cause. Even granting that there is a definite medication for the gouty diathesis, as there is for the arthritic manifestations, it is doubtful if one could succeed by such specific treatment in preventing gout from affecting the vascular system, or endarteritis from appearing; in fact, the so much vaunted alkalies can do little for the joint affections, and still less for gout of the heart, or the constitutional condition.

Angina Pectoris of Organic Origin.—Thus far the causal treatment has been practically nil, with the single exception of angina from tobacco. The anginas of organic origin are not any more amenable to treatment directed at the cause. What can we do to remedy alterations of the coronary arteries, degenerations of the cardiac muscle, dilatation of the cavities, and lesions of the aorta, which in reality oftener cause attacks of angina pectoris than mitral lesions? There is no cure for the thoracic angor that results from these grave lesions.

Ætiological Treatment of Angina Pectoris of Hysterical Origin.—It would seem that such cases might be easily remedied, that—bearing in mind the hysterical nature of the affection—a preventive treatment might easily be instituted. Practically, however, hysterical angina is very rare, and the cases which have been reported as such have generally been found to be simulated attacks, or real convulsive attacks, of common hysteria with painful irradiations; the diagnosis was at fault. These pseudo-anginas might almost certainly be benefited by hydrotherapy. Were I certain that I had to do with a genuine case of angina pectoris from hysteria, I would preserve the patient from cold douches, which might have a fatal result. These neurotic anginas, almost, if not quite as dangerous as those of organic origin, can be little benefited by the antispasmodics—asafœtida, valerian, musk, castor, etc.

Resume.—The ætiological treatment of angina pectoris is unsatisfactory, and generally unsuccessful; the best that we can do, then, is to treat the paroxysms, and endeavor to prevent their return.

Methods of Treatment of the Paroxysms.—In the presence of a patient who is suffering from an attack of angina pectoris, you are to search promptly for something to calm the pain, relieve the breathing, and regulate the circulation. The principal means are, first:

Hypodermic Injections of Morphine.—Hypodermic morphine claims a foremost place by reason of the rapidity of absorption and of physiological action. A centigramme of hydrochlorate of morphine (about one-sixth of a grain) ordinarily suffices to alleviate the pain, which is the principal factor in the paroxysm. I am not afraid to repeat the injection to prevent a return of the angor. I have seen, with one of my hospital colleagues, an old man who was cured of his præ-

cardial distress—the result of excitation of the cardiac nerves by organic disease—by the daily use, for several months, of morphine subcutaneously. With the same physician I treated still more recently an eminent political personage who finally succumbed to an attack contracted, in the chilly weather of March, by riding in an open carriage at nine o'clock in the evening in the Bois de Boulogne. As he died in spite of morphine it was reported that he died from morphine. Latterly, and since the experiments of Filehne, fear has been expressed that these subcutaneous injections might occasion dyspnæa, and even that dangerous form known as Cheyne-Stokes respiration. This fear can hardly contra-indicate the use of the opiate for pain where the element of dyspnœa is absent ; if there be any embarrassment of respiration, it is owing to the pain, and nothing else.

Nitrite of Amyl.—Recommended as far back as 1857 by Guthrie, then by Gamgee, Brunton, Wood, more recently by Pick, Guttman, Schram, Otto, of Germany, thoroughly studied in France in 1873, by Amez-Droz, then by Bourneville, and Dujardin-Beaumetz, nitrite of amyl constitutes one of the most active and most useful means in the treatment of angina pectoris.

Physiological Effects.— Experimental physiologists — Filehne and Mayerin, Germany, Duceau and Franck in France— have very recently been occupied in investigating the effects of this singular toxic agent, whose *modus operandi* they have defined. First of all, the effects of nitrite of amyl on healthy animals and healthy human beings are as follows :

Action on the Blood-Vessels.—Reddening of the skin and internal organ. The first effect of nitrite o amyl, inhaled in the dose of from two to four drops, is reddening of the face and neck, with red spots on the chest and mottling of the abdomen, but no red markings of the lower extremities. The same reddening is seen in the internal cephalic organs, among others the pia mater, whose blood-vessels are markedly dilated, at the same time that the retina and the lungs remain in the normal state.

Dilatation of the Vessels.—The most remarkable phenomenon, then, is dilatation of the blood-vessels and this is attended with diminution of vascular tension, which may fall to 0.050 millimetre.

Causes of the Vascular Dilatation and Depresion.—Either this is a result of paralysis of the vaso-constrictors and the blood-vessels which they innervate (the older and, perhaps, more general view) or it is produced by excitation of the vaso-dilators. as Franck supposes.

Is this paralysis of vaso-constrictors or excitation of vaso-dilators--whichever it may be—of peripheral or central origin? That it is of peripheral origin seems borne out by the experiment of dividing the spinal cord, in which even, the vessels continue to dilate under the influence of the nitrite. If the vessels of the head dilate more readily than the others, this fact does not favor the hypothesis that the paralysis (or excitation) is of central origin. The blood-vessels of the head are more dilatable, because their middle membrane is more elastic and more muscular. Finally, the proof that it is all peripheral is that you may cut all the cerebro-spinal nerves, and the phenomenon of dilatation by excitations of the vaso-dilator nerves none the less persists.

Action on the Heart.—The heart's action is considerably quickened, and the number of beats rises to double the natural ; the nitrite acts on the pneumogastric centre, which is finally paralyzed. At the same time, the force of the heart is undiminished, even if the vascular tension is diminished, which proves that the vascular depression is not an effect of primary enfeeblement of the heart.

Action on the Respiration.—In man one of the most remarkable phenomena from the very commencement is the facility of respiration, whose type, moreover, does not undergo modification ; the patient feels that he can breathe more freely. In animals there is, first of all, acceleration of the respirations, which become deeper and more prolonged. With larger doses the respiration becomes slower.

To sum up : in the first period of the action of the medicament vascular tension is lowered, the vessels are dilated, the action of the heart is very much quickened, the respiration rendered more free and easy. At a more advanced period, the pressure remaining lowered, the heart becomes slowed as well as the respiration.

Practical Applications.—In its application to the treatment of angina pectoris, nitrite of amyl produces effects which are remarkable and immediate. I have verified this in two patients, one of whom was affected with Corrigan's disease, with severe nocturnal attacks of angina pectoris. This patient occupied No. 20 Ward, St. Christophe. From the very first exhibition of the nitrite — three or four drops inhaled from the open palm—the paroxysm ceased, instead of lasting fifteen minutes or more, as was the case when the medicine was withheld.

How does this remedy act ? It suppresses pain ; it facilitates the circulation by dilating the blood-vessels ; it renders the respiration more free. And all this is done in an instant almost. Nitrite of amyl, therefore, constitutes the most efficacious and the most prompt of the modifiers of the heart, and especially of the circulation. The sanguineous irrigation by the coronary arteries is increased, is accelerated, like that of the other vessels ; the cardiac ischæmia ceases, the heart resumes its tasks immediately, and the respiration,which before was embarrassed,becomes again free. But do not forget that, in going beyond the dose indicated, you expose the patient to the risk of cardiac syncope. Remember, moreover, that the patient, in a sufficiently brief space of time,becomes accustomed to the remedy, so that its good effects become less and less manifest.

Nitro-glycerin.—The physiological effects of this medicament are very much like those of nitrite of amyl. Dr. Murrell, an English physician, was one of the first to call the attention of the profession to this remedy. I have tried it in a few cases, giving internally one or two drops of a one-per-cent. solution; it has seemed to me to give relief.*

Chloral.—Chloral acts very promptly in procuring sleep and in facilitating respiration, but its effects on the circulation are almost nil in these cases. It is not to be depended upon, and I have abandoned its use.

Divers Excitants. — Colin recommends the acetate of ammonium, which is also a favorite with Vignier, in the dose of six grammes.

I shall speak of electricity under the means of prevention. It has no curative power during the paroxysm.

RESUME.—Morphine subcutaneously, nitrite of amyl in inhalations (three to four drops)—these are the medicinal measures which seem to me likely to be relied on in the future. Both diminish the intravascular pressure, and thus facilitate the circulation. But there is a physiological contrariety between these two medicaments which seems to demand elucidation. Morphine does, in fact, diminish the intravascular pressure by giving more tone to the blood-vessels which are made to contract under its influence, but in such a way as to help on the circulation, and thus reenforce the work of the heart, whose tasks are lightened when the auxiliary vaso-motor forces are in their highest state of efficiency. Nitrite of amyl lessens the blood pressure by dilating the vessels, and thus removing obstacles to the free circulation, and in this way lightening the heart's labor. The circulation by the corronary arteries is thus favored by either mode of action, but in a more marked manner by nitrite of amyl. Moreover, the two medicaments assuage the pain which embarrasses the heart's action, and facilitate respiration, which is also embarrassed.

TREATMENT OF ANGINA PECTORIS IN THE INTERVAL OF THE ATTACKS.—Besides the ordinary recommendations to persons suffering from heart disease, spirit-drinkers in general, and smokers in particular, to abstain from customary excesses, it remains to do what can be done to prevent the attacks by hygienic and medicinal means. Jurine advises persons who are victims to this painful cardiac affection to live in the country, to keep as free as possible from all care and excitement, to inhabit a ground tenement, to walk and ride a little every day. This advice would be very good if it were practicable.

The medicinal measures which I employ habitually are: 1. Bromide of potassium; 2. Digitalis; 3. Electricity (hardly habitually, but it deserves mention); 4. Arsenic (of which the same may be said); it is sometimes of use as a vaso-motor tonic, but its action is doubtful.

Hydrotherapeutics ought to be absolutely proscribed.

1. Bromide of potassium determines contraction of the blood-vessels, calms the nervous system (particularly the centres of special sense), and induces sleep; it is a regulator of the peripheral movements of the blood. Under its action the patient becomes less impressionable to the physical and psychical influences which might provoke a return of the paroxysm. But this medicine has the grave inconvenience of producing a debility which is more or less permanent, and can not be continued with impunity beyond a certain time.

2. Digitalis, when the thoracic angor results from cardiac atony or degeneration, presents a real advantage over the bromide; it fortifies and sustains the action of the heart, and is in every way the preferable medicament.

3. Electricity has been applied in divers way, and in accordance with the different theories which have been put forth as to the nature of the malady. If employed from confidence in the pneumogastric-nerve theory of Eulenburg,* and an attempt be made to galvanize this nerve, you run the risk of arrest of the heart's action, the unfortunate case reported by Duchenne is in proof of this.

If you desire to influence the sympathetic alone, in accordance with the theory of Martin and Hachard, there is a practical difficulty in the way, and, moreover, a physiological heresy lurks behind the theory. There is, in fact, no paralysis of the sympathetic to overcome. The disease is in reality attended with excitation of the cardiac sympathetic nerves, and the coronary vessels, the latter being in a state of erethism—there is no paralysis in the case; on the other hand, there is not even excitation of the sympathetic nerves in general, accompanied by a contraction of the blood-vessels in general. The disease (so far as the nerves implicated are concerned) being partial and limited, how are you going to benefit the pathological condition by electrical currents applied to the sympathetic trunk or plexuses? If it were possible to galvanize the cardiac sympathetic nerves, would you not augment rather than diminish vaso-motor contractility? The subject demands further study.—*N. Y. Med. Journal.*

* Mr. Field, of Brighton, England, was the first to describe, twenty years ago, the physiological effects of nitro-glycerin. Dr. Murrell afterward repeated the observations of Field, trying it on thirty-five patients. The action of nitro-glycerin is a little slower than that of nitrite of amyl. —TRANSLATOR.

* Eulenburg, "Traité des maladies nerveuses," 1878. He describes two forms of the disease, one of which is due to direct excitation of the vagi nerves, the other to reflex excitation of these nerves. He also describes two other varieties of different nerve origin.

RETENTION OF URINE FROM ENLARGED PROSTATE—RETENTION FROM STRICTURE OF THE URETHRA—CHRONIC ENLARGEMENT OF THE TONSILS—HYDROCELE.

A Clinical Lecture delivered at the Hospital of the University of Pennyslvania.

By John Ashhurst, Jr., M.D., Professor of Clinical Surgery in the University of Pennyslvania.

[Reported by Wm. H. Morrison, M.D.]

Gentlemen: The first patient whom I shall show you to-day is one on whom I had intended to operate for stricture, but as he is not very well this morning, I shall postpone the operation until another occasion. I bring him before you for the purpose of making some remarks on retention of urine, which was the condition for which he was admitted. As I have told you on a previous occasion, I had in this case to tap the urethra behind the stricture to relieve the retention. I want now to use this patient in connection with one who presented himself about ten days ago, as an illustration of some varieties of retention of urine.

The latter patient came to us suffering, as he supposed, from incontinence of urine. His statement was that for a year his water had been running away from him, that he had required to urinate very frequently, and that it had been impossible for him to keep his clothing dry, and he supposed that he was suffering from paralysis of the bladder. Not only was this his own diagnosis but it was also that of the physician who had attended him, for he had been taking all this time one of the preparations of strychnia to give tone to his nervous system, and thus to relieve what was supposed to be incontinence. Whenever you find what is called incontinence in a man past middle age, you should suspect that there is something below what appears on the surface. True incontinence is a very rare affection in adults. In children we often have what is termed nocturnal incontinence, and sometimes such a weakness of the organs as will allow the urine to escape during the day, but we meet with this condition in adults only under exceptional circumstances. In disease of the spine there may be after a time complete paralysis of the bladder, and then true incontinence occurs, the urine flowing out of the urethra as fast as it flows from the ureter. These cases are, however, very rare, and whenever you have incontinence in an adult man past middle age, you should always suspect that there is enlargement of the prostate. Stricture of the urethra does not usually give rise to incontinence. There may be very frequent micturition, but there is not apt to be the constant dribbling which often attends prostatic hypertrophy. In enlargement of the prostate there is often great distension of the bladder. This condition may also be present for a short time in stricture, but the pain is then so great that the patient soon calls attention to his condition. In enlargement of the prostate, however, the distension comes on gradually; the patient does not entirely empty the bladder; when he passes his urine a certain portion remains. This is called the residual urine and varies in amount from one to two ounces. You can easily understand that the bladder, never being able to completely empty itself, the accumulation may go on until the bladder becomes full. The retention comes on so gradually that the patient is usually not aware of it. When the bladder becomes entirely full, so full that it will hold no more, there is of course an overflow; so it is that a patient who really has retention, imagines that he has incontinence.

This was the condition in the patient of whom I am speaking. There was enlargement of the prostate, and the residual urine gradually increased until the bladder was distended to its utmost capacity. Then the water that passed into the bladder simply overflowed through the urethra. The patient was in this condition for a year, taking strychnia, but, as you can easily understand, without any benefit. Suspecting something of this kind I asked him to lie down. I then percussed above the pubes, and found marked dullness and a distinct tumor. Passing a catheter, which was done without any trouble, I drew off three and a half pints of urine, to the patient's great relief, and to his equally great astonishment. In a few days he again returned, having in the meantime purchased an elastic catheter. The instrument was again passed and showed that there had been some reaccumulation of urine, but not to the same extent as before. Dr. Dunn then instructed him how to use the catheter, and he was told to draw off the residual urine once or twice a day.

In all these cases of enlarged prostate, the urine should be drawn off at regular intervals. If this is not done, the urine undergoes change, becoming ammoniacal, cystitis is set up, and, at a later period, we have developed that form of renal disease which is called "surgical kidney." The cystitis not only causes chemical changes in the urine, but the very presence of ammoniacal urine increases the cystitis, so that the two conditions react one on the other. After a time a certain portion of the excrementitious matters remain in the blood, and we have the condition known as ammonæmia, and ultimately perhaps distinct symptoms of uræmia, with dropsical swellings and coma.

In this young man we had retention from a different cause. It was caused by a stricture of the urethra, the result of an old gonorrhœa. When first admitted he was suffering greatly from retention of urine. As I have said, the accumulation in the enlargement of the prostate is so gradual that the patient is not aware of it. Sometimes there will be a sudden enlargement of the prostate from cold or from some exposure, and then the patient will suffer from acute retention, but usually the retention comes on so gradually that it causes no pain.

In stricture, however, the onset is very different—it is sudden. There has been for a long time a gradual contraction of the urethra, until finally the patient passes but a very small stream. At last comes a day when, from spasm or from some inflammatory condition, the urethra entirely closes. There will then be great pain, constant efforts at micturition, and the development of a large suprapubic tumor. In this patient we had dullness reaching olmost to the umbilicus.

Before admission, efforts had been made to relieve the retention by the use of instruments, but they were not successful. Not only were they not successful, but a false passage was made. As I have said, when admitted to the hospital this patient was suffering greatly, and the question arose as to what should be done. Our resident surgeon, Dr. Dunn, made one attempt to pass the catheter, but not being successful he immediately desisted, put the patient into a warm bath, and gave him full doses of opium. This is the best palliative treatment that you can adopt in retention from stricture. Under this treatment, the patient in a few hours relieved himself. The congestion which had caused the attack had subsided. When I saw him he was passing water in a small stream, and frequently. Two days later, another attempt was made to pass an instrument into the bladder, but without success. Whether from the irritation thus produced, or from other causes, I cannot say but on the fourth day retention again occurred. When I saw the patient he was suffering greatly, and there was again a large tumor reaching almost to the umbilicus. The patient could hardly keep still on account of the pain.

I have learned from experience that when a patient is in this condition, it is not safe to leave him before securing the evacuation of his bladder. Some years ago a patient with retention from stricture was under my care in another hospital. I endeavored, without success, to pass the instrument. I divided one stricture in the anterior part of the urethra, but there was one farther back which prevented the introduction of the catheter, and which it was evident would require external section. As it was late in the day, I concluded to postpone the operation till the next morning, leaving instructions that if the symptoms became more urgent the bladder should be aspirated. My instructions were not carried out, but a few hours after midnight the information was sent to me that the urethra had burst, and that urinary infiltration was taking place. When I reached the patient, I found that the urethra had given way behind the stricture, that the urine had escaped into the cellular tissue of the scrotum and thighs, and that the scrotum was becoming gangrenous. There was nothing to be done but to make free incisions into the scrotum and soft parts of the thighs, and then to puncture the urethra behind the stricture. If the bladder had been full I should have aspirated, but as the urine had escaped into the cellular tissue it was necessary to make openings to drain it away. The patient, unfortunately, did not recover; he lived for some two or three weeks. After the operation, he had no further trouble with his urine, but succumbed to the sloughing of the scrotum and other tissues.

Hence I tell you that it is not safe to leave a patient in this condition without relief. It is not safe to rely upon other people to do what is proper. It is better to anticipate by a few hours than to run any risks.

When I found that I could not pass the instrument in this present case, that its introduction produced urethral hemorrhage, I decided to relieve the retention by a more radical method. I should have aspirated, but that our aspirator was out of order. I, therefore, adopted the next best plan—it is really perhaps as good as aspiration—that is, tapping the urethra behind the stricture. This, which is known as Cock's method, is a very simple operation if you are familiar with the anatomy of the parts. The patient is placed in the lithotomy position. You first pass the index finger of the left hand into the rectum, and fix the apex of the prostate, the point where the membranous joins the prostatic portion of the urethra. An incision half an inch long is now made in the raphé, in front of the anus; next a slender knife with a sharp point is introduced into the wound in front of the anus, and with its back towards the rectum, and is passed backwards towards the bladder, being guided by the sensation of the finger of the left hand to the point where it is designed to open the urethra. We know, as has been pointed out by Sir Henry Thompson, that stricture does not affect the prostatic portion of the urethra, or that, if it ever does, it is an exceedingly rare occurrence. In this operation, therefore, you are pretty certain to get behind the stricture. This procedure, of course, would not be applicable to cases of retention from enlarged prostate. Having introduced the knife, as I have described, push it cautiously onwards, and then cut forward for about half an inch, thus making an opening into the urethra just at the apex of the prostate. A grooved director is to be passed into the bladder, and the urine will then probably begin to flow. It is better while the director is in the bladder to pass in through the wound a flexible catheter.

This is what I did in this case, and here I show you the wound half an inch in front of the anus and in the median line. The guides in this operation are the apex of the prostate as ascertained by the finger in the rectum, and the median line as marked by the raphé. There was a little oozing of blood, which we checked by packing lint around the catheter, just as we would in hemorrhage after lithotomy. The lint and catheter were removed in a few days. The patient has had no further trouble with his water. He now passes it as a woman does, through the perineum. He has complete control, because the sphincter is behind this opening. The only inconvenience is that he has to sit down to urinate.

As I said to you last week, it is proper when you have a patient in this condition to put the question to him, whether or not he wants anything further done. In a case on which I operated two or three years ago, where a portion of the urethral tract had been wholly obliterated, and where I established a new passage through cicatricial tissue, the patient found so much difficulty in keeping the passage open that he finally concluded to let it close again, and to be satisfied with urinating through a fistula in the perineum.

CHRONIC ENLARGEMENT OF THE TONSILS.

The next patient is one on whom I expect to perform an operation which I am not in the habit of doing, and one which I do not recommend; but we must judge each case by itself. This young man has enlarged tonsils. He wishes to enter the navy, but has been rejected on that account. I have no doubt that in the course of a few months, we could reduce the size of the tonsils without an operation, but I think that the particular exigencies of the case justify the use of the knife in this instance. Some surgeons do this operation with great freedom, but I do not like to perform any operation when I think the case can be cured without it. The old plan of performing this operation, and a good plan it was, was described by the older surgeons in the words, " volsello excipere et scalpello excidere," that is to say, catch the tonsil with the fulsellum forceps, and cut it off with a blunt-pointed knife. The only precaution to be adopted is to cut towards the median line, and not towards the side. If you cut towards the side, you run some risk of wounding the carotid artery or the internal jugular vein. The modern plan is to use a guillotine ; the best is the one devised by Fahnestock, and since modified by various French instrument makers. It consists of a ring which surrounds the portion of the tonsil to be removed, a fork which is pushed forward and holds the tonsil, and a concealed knife which cuts off the slice intended to be removed.

These tonsils are so large that I can remove but small portions of them, but this will be sufficient to start the process of involution. Occasionally there is troublesome hemorrhage after this operation. For this bleeding, one of the best applications is a gargle of turpentine. This has been recommended by Prof. Erichsen, and is, I believe, as good a mode of stopping the hemorrhage as can be adopted. The plan which I recommend, and which I believe to be always successful if properly carried out, is the application of iodine. If you simply paint the tonsils with the tincture of iodine, you give a great deal of pain, and the application is not effective, because the patient has to wash away the iodine on account of the pain. The application which I use is composed of equal parts of tincture of iodine and glycerine. The glycerine renders the iodine less painful, and at the same time it is retained longer in contact with the tonsil. You may, in addition, use iodine internally in the form of the iodide of iron. I have never failed by this method (the application of iodine and glycerine and the internal administration of iodine) to reduce the enlargement. The tonsils may be painted about twice a week. This requires several months to effect a cure, and if the patient is in a hurry you will have to adopt some other plan.

HYDROCELE.

This patient presents an affection with which you are all familiar. You say at once that this is a hydrocele. You see the pyriform shape, which is characteristic. It has also an elastic feel, and, perhaps more distinctive than anything else, its weight is not great in proportion to its bulk. The differences between hydrocele and hernia are marked. If you invaginate the scrotum with the finger, you will find in hydrocele that the external ring is clear ; but in hernia you will feel a tumor extending into the inguinal canal, and find that the ring is not clear. Sometimes you have a source of confusion in the existence of hydrocele of the cord in connection with hydrocele of the tunica vaginalis. In these cases you have to resort to other tests. Another test for hydrocele is that by transmitted light. It is not always practicable, however, to make use of this test, which may fail on account of several sources of error. Thus, the pigment of the skin may prevent the passage of light. If the patient be a colored man, or deeply pigmented, this test may fail. Again, the tunica vaginalis may undergo such changes as will prevent the transmission of light. Many years ago, when I was a house surgeon, I remember a patient who came to the hospital with a scrotal tumor. It was examined by transmitted light, but no light could be seen through it. The surgeon, therefore, decided that it was a tumor of the testicle and proceeded to remove it; but at the first incision there was a gush of fluid which showed that it was a hydrocele after all. The tunica vaginalis had undergone calcareous change, and the plates of calcareous matters had prevented the transmission of the light. This patient does not wish to have the operation for radical cure performed. It is not convenient for him to remain in the hospital at present, but at some future time he will return. The only precautions to be observed in tapping a hydrocele are, in the first place, to have the trocar in working order. I have seen a surgeon tap a hydrocele, and then find that the trocar was so firmly rusted to the canula that it could not be removed. The second precaution is to avoid the superficial veins. The third is to introduce the trocar perpendicularly to the surface of the hydrocele, and as soon as the trocar has entered the tunica vaginalis, to depress the handle of the instrument. If you push

it straight forwards, you run the risk of puncturing the testicle, which does no particular harm, but certainly does no good, and you may bury the trocar so deeply that no fluid will flow. The rule is, as soon as you have the instrument well into the tunica vaginalis, to depress the handle. Another precaution is to remove all the fluid, and allow none to escape into the cellular tissue. It may do no harm—in fact one of the methods of treatment is to allow the fluid to escape into the cellular tissue—but it may produced suppuration.

You now see the fluid escaping. It is of a straw color. Occasionally you have fluid of a different appearance. After a hydrocele has been tapped more than once, a marked change in the character of the fluid may occur. It may coagulate spontaneously. This is not met with unless the hydrocele has been tapped before, and is probably the result of a slight inflammation. The fluid is always coagulated by heat.

Then we have encysted hydrocele, in which you may have present a milky fluid contained spermatozoa. Many cases, but not all, of encysted hydrocele are properly called spermatocele. These are cysts formed in connection with the spermatic structure. One form of encysted hydrocele is that in which the fluid is contained in a portion of the tunica vaginalis, separated from the rest by adhesions; such a case is not properly called a spermatocele. If in any case the fluid which escapes after tapping gives you reason to suspect spermatocele you should caution the patient how he goes about afterwards. Some years ago I tapped one of the largest hydroceles I ever saw, and found the fluid of this character. Although I cautioned the patient against moving about, he went to market, and carried a heavy basket. The result was that he had inflammation of the sack, and was confined to bed for five or six weeks. This might have been avoided if the patient had kept quiet for a few days. While in a case of simple hydrocele, you may safely allow the patient to go about after tapping, you should, if you find that peculiar character of fluid which indicates a spermatocele, caution him to keep quiet.

It is said that the radical cure of hydrocele may be effected by the use of pressure. It is said that if the parts are strapped with adhesive plasters or the gum-elastic bandage further accumulation will be prevented. But simple tapping, without any other treatment, will sometimes effect a cure; and it is possible, therefore, that those cases which, it is alleged, have been cured by pressure, would have been cured by tapping alone.

I now apply a little strip of plaster over the opening made by the trocar. The patient should wear a suspensory bandage. If the sack again fills and he desires a radical cure, he will return.—*Med. Bulletin, Phil.*

ANÆSTHESIA IN OBSTETRICS.

By Dr. Just. Lucas Championniere.

(*Translated by D. C. Holliday, M.D.,*

The administration of chloroform to women in labor is one of the most interesting subjects to obstetricians in general practice.

It is a well-established fact that if the majority of our confrères are obliged to allow a large number of their female patients to go through labor without assistance, there is a certain number where the use of chloroform would be easy, and others when its use becomes a necessity.

It must be admitted that we are at present without a recognized and satisfactory guide on this important point.

Many trifling publications have appeared. *Campbell* published the first part of an interesting pamphlet on this subject, but, unfortunately, death prevented its completion.

A number of articles have appeared from time to time; some good ones among them we might mention, especially an excellent thesis by one of our former pupils Dr. Despian, entitled "*Etude Clinique du Chloroform dans les Accouchements Naturels*, 1879."

The question, however, is somewhat neglected, and we hail with pleasure the recent publication of an excellent thesis of 350 pages on this interesting subject by one of the distinguished pupils of our Parisian Hospitals, *Dr. Dutertre*, entitled *de l'Emploi du Chloroform dans les Accouchements Naturels.*

This work treats fully of the history, the physiology, and all details of the use of anæsthetics in obstetrics.

The author, with singular tact, has purposely and wisely avoided too extended clinical discussion for the excellent reason of his own youth; nevertheless, this volume contains all that is necessary for any one to make an exhaustive study of the subject. Everything is clearly expressed, with great originality in style, which in nowise detracts from its interest.

M. Dutertre, having carefully studied the physiology of his subject, clearly demonstrates the great necessity of the use of *pure chloroform*, an idea which we ourselves have recently called special attention to.

The perusal of this work brings forcibly to our minds the similarity of our teachings on this subject, and we cannot but think that our readers will thank us for the further discussion of those practical and clinical facts bearing on this subject without a repetition of what we have already published.

Those authors who deny the practicability and usefulness of producing in a woman during labor a semi-anæsthetic condition compatible with consciousness, have done so without sufficient practical experience.

All discussion falls to the ground when disproven by extensive clinical trial and experiment; such has been my course not only in private practice but in the wards of one of the most extensive hospitals in France.

The method of using anæsthetics must differ essentially from that usually employed during ordinary surgical operations. In exceptional cases the inhalation must be slow and progressive.

Ordinarily from ten to twenty minutes is required to produce calmness, and a semi-anæsthetic condition; this is a result extremely difficult, not to say impossible to obtain, unless the patient is docile and willing.

Some women require but an extremely small quantity of the anæsthetic—twenty to thirty grammes for several hours. However, should the condition of semi-anæsthesia be required to be kept for many more hours, from 60 to 100 grammes up will be necessary.

When I order chloroform I usually divide it into two vials, 50 grammes each, and I rarely find it necessary to employ more than one vial, unless operative interference is required, and it becomes essential to make anæsthesia complete.

For a long time I taught that some women required much larger quantities of chloroform to produce the same effects, say 100, 150 to 200 grammes. But since I paid attention to the *quality* of the chloroform used, now only prescribing the purest to be obtained, I find these differences far less marked.

Indeed, the attempt to produce semi-anæsthesia by the use of ordinary chloroform is to court failure.

There are some women, in whom, without producing positive muscular relaxation, it is necessary to push the anæsthesia to a partial loss of consciousness before perfect calm is reached.

In case of necessity this is productive of no ill effects. I have myself maintained a state of complete anæsthetic insensibility, or coma, varying from three to seven hours, without danger.

Among other cases I will cite one, where I performed Porro's operation, on a woman who had already been fully under the influence of chloroform for three hours; the operation required one full hour for its completion, and the patient recovered without a bad symptom. Here, there was the absorption of 370 grammes of chloroform.

I merely mention this to show that large quantities are often tolerated. I have already stated that the period of dilatation of the uterus was frequently appreciably shortened by the early use of chloroform; hence my rule is never to wait for the expulsive stage only, for commencing its use.

No definite time can be fixed for the continuance of anæsthesia; this necessarily varies in different cases. Two or three hours are usually sufficient; eight or nine hours or more, may become necessary.

In many of those cases requiring a prolonged use of the anæsthetic I have carefully followed up their subsequent history, and in no single instance have I been able to discover any injury either to mother or child.

Is the use of chloroform during labor absolutely without danger? This may be positively affirmed, if used in the manner we have pointed out.

Does this mean that no precautions are necessary in its use? Most certainly not. It is not, however, because death is at all to be dreaded in its use.

M. Dutertre in his excellent thesis shows with what eagerness the opponents to the use of chloroform, detail facts and observations in support of their position, which upon careful examination are proved to be fallacious, and often even ridiculous.

Those, however, who make a daily use of chloroform recognize that they often meet with threatened accidents which should never be neglected, showing individual idiosyncrasies forbidding its use.

No one more than myself has insisted upon these peculiarities, and our readers are already fully aware of my views, elsewhere expressed.

According to their peculiar willingness to adopt or reject the method of using chloroform advised, some authors recognize more or less cogent reasons for its indication.

It may be stated briefly, that pain is the only true indication; where pain is really severe, or where it is really unbearable; whenever pain is *excessive*, no matter at what stage of labor, recourse may be had to chloroform.

Its early employment undoubtedly accelerates, rather than retards, the progress of labor, for the excellent reason that the uterine contractions subsequent to the use of the anæsthetic, soon revive after a period of marked relief, and continue with more regularity and force.

A certain degree of rigidity of the cervix readily yields to the effect of chloroform, but this happy effect cannot always be expected if this rigidity has been allowed to continue for many hours. When a woman in labor has suffered intense pains for a long time it becomes the duty of the medical attendant to administer chloroform. Often in these cases the necessity for *immediate* effect renders it imperative to push the chloroform to perfect anæsthesia, for it is a recognized fact that in a woman thoroughly enervated by long suffering it is much more difficult to obtain the satisfactory effect of chloroform.

The contra-indications to the use of chloroform have been detailed by many authors with such fanciful precision as to show that they are not the result of experience.

Thus a cardiac affection is considered a contra-indication to its employment.

It has been my good fortune to have had many excellent opportunities to prove the contrary, and I shall proceed to mention one among many cases.

The subject was a lady affected with a congenital affection of the heart, when, by the judicious use of chloral, pregnancy had been prolonged to full term, after a series of previous miscarriages. Thanks to the early use of chloroform every stage of labor was accomplished with ease and rapidity, notwithstanding a rather stormy beginning, and by

the application of the forceps at the inferior strait she was delivered of a child, weighing upwards of 4 kilogrammes.

It is very certain that to relieve fruitless effort, and prevent continued muscular contractions, is a positive benefit to the heart.

A dense pulmonary affection may be a contra-indication ; here the physician's responsibility becomes much greater.

Pulmonary lesions may be rendered threatening, if the anæsthetic be pushed too far. Nevertheless, I have frequently used chloroform freely in different stages of phthisis, and once even during the course of pneumonia with the best possible result both for mother and child.

Are any accidents to be feared? I have mentioned phenomena of apnœa, many of which are undoubtedly attributable to the bad quality of the chloroform.

However, I have no doubt that rare and exceptional cases may be met with.

Inciting the thorax and insisting upon free respiratory efforts, on the part of the patient, are followed by their rapid disappearance.

Can vomiting be the result of its protracted use? This is not absolutely impossible, yet I have rarely seen it ; but I have frequently seen chloroform put a stop to obstinate vomiting during labor.

Possibly the most important objection made against the use of chloroform is that it favors the occurrence of hemorrhages.

A careful examination of the testimony of various authors proves that their opinions are simple allegations rather than established facts.

A careful review of our own observations does not at all corroborate the truth of these allegations.

On the contrary, if we did not hesitate to assert facts without proofs, we would be inclined to believe that chloroform rather prevents the repetition of useless uterine contractions, and puts the patient in better condition for permanent uterine contraction. This appears to be the result in a number of cases.

The same may be said with regard to the puerperal condition. Not only has it been equally satisfactory, but the return to health has often been more easy and rapid.

Another *theoretic* objection has been raised, claiming the deleterious effect of chloroform on the infant. First, the patient rarely takes much chloroform ; however, admitting that she took a great deal, I have never, in a single instance, noted any injurious effects on the child. A fact too, worthy of remembrance, is that a new-born infant bears chloroform very well.

It is probable that anæsthesia in obstetrics might be produced by the greater number of recognized anæsthetics. I, myself, have only tried ether, and the bromide of ethyl.

Both have appeared to me inferior in action to chloroform. Ether, without a special apparatus, fills the room with dangerous vapor, its action, too, is too slow. Bromide of ethyl emits a nauseous vapor, very disagreeable even to the accoucheur himself ; its action is much slower, and not by any means less dangerous than chloroform ; on the contrary, notwithstanding the hopes entertained of its many advantages, by its early advocates, the record of its use in general surgery has been that of frequently producing most formidable accidents.

In general practice, it should be borne in mind, that chloroform used to produce partial anæsthesia, and pushed to *complete* anæsthesia where occasion requires it, is of such great use that the accoucheur should never be without it. The chloroform used should always be chemically pure.

At the same time that I always have pure chloroform at my disposal, I also provide myself with reliable *ergotine*—whether we simply use it hypodermically in case of hemorrhage, or where you make a systematic use of it as I do, after all deliveries.

After complete anæsthesia, the use of *ergotine* is far more reliable than any preparation of ergot.—*N. O Med. and Surg. Journal.*

CURE OF ABSCESSES WITHOUT CICATRICES.

Dr. Quinlan recommends the passage through the abscess of a fine silver wire, which, with the ends tied outside, will act as a drain. This must be done before the pus reaches the surface, when it is, say, half an inch from the external surface. No poulticing must be used, and when the abscess is evacuated a compress applied. This procedure has never failed in his hands.—*Med. and Surg. Reporter.*

GARGLES.

GARGLE IN TONSILLITIS AFTER THE ACUTE STAGE AND IN RELAXED SORE THROAT.

℞. Acid. hydrochlorici dil., ʒ 3 ; mellis depurati, ℥ 1 ; infus. rosæ acidi, ad. ℥ 8. M. Sig.—As gargle.

GARGLE IN APHTHÆ AND ULCERATIONS ABOUT THE FAUCES.

℞. Boracis, grs. 160 ; tr. myrrhæ, ʒ 1 ; aquæ, ad. ℥ 8. M. Sig.—Gargle.

IN ULCERATION AND FISSURE OF THE TONGUE.

℞. Boracis, grs. 60 ; glycerini, ʒ 12 ; aquæ rosæ, ad. ℥ 4. M. Sig—To be painted over the fissued surface.

GARGLE IN CHRONIC INFLAMMATION OF THE FAUCES.

℞. Boracis, grs. 180 ; syrupi scillæ, ℥ 1 ; aquæ, ad. ℥ 8. M. Sig.—Gargle.

IN CHRONIC GINGIVITIS, ULCERATION, LOOSENING OF THE TEETH.

℞. Tinct. myrrhæ, ʒ 4 ; acid. tannici, gr. 35 ; Eau de cologne, ʒ 12. M. Sig.—Sponge the gums with this preparation three or four times a day.—*Med. Gazette.*

HOT WATER IN THERAPEUTICS.

Several years ago I learned in my personal experience that no agent relieves nausea and vomiting so satisfactorily and promptly as water as hot as can be drunk. Since then, I have used it in a large number of cases, and it has been uniformly reliable. The following classification may be made of the cases in which it has been used :

(1.) Cases in which nausea and vomiting occurred at the onset or during the course of acute febrile disease.

(2.) Cases in which these symptoms were caused by overloading the stomach when its functions had been impaired by protracted disease.

(3.) Cases in which they were produced by nauseous medicines (not emetics) at the time they were taken.

(4.) Cases of acute gastritis caused by the ingestion of irritants.

(5.) Cases in which these symptoms were purely reflex.

(6.) Cases of chronic gastritis.

(7.) Case of colic in newly-born infants.

(8.) Cases of flatulent distention of the stomach.

Among the cases of Class 1 was a case of diphtheria and one of puerperal septicæmia, as well as one of tuberculosis, in which the stress of the disease fell upon the digestive apparatus. In each of these a half-glass of hot water always gave prompt relief when every other remedy failed. The most impressive and permanent results of this remedy seem to be in cholera infantum—hot water being retained when everything else was rejected; and it would so compose the stomach that food could be given almost immediately afterward.

The nauseant medicines mentioned in Class 3 are often retained if given in hot water as a vehicle. When an enormous quantity of whiskey has been drunk, and the stomach will not tolerate anything else, hot water will be retained, and then food can be given.

Hot water is less satisfactory in vomiting of pregnancy, yet it is of considerable value in many cases.

In the various manifestations of indigestion, classed 6, 7 and 8—hot water is almost invariably followed by good results. In dyspepsia it may be given before each meal, as well as at other times, to cause the discharge of any undue amount of gas in the stomach by eructation. In this way it affords relief to young infants suffering colic, and it is rarely necessary to prescribe anything else. It has been used successfully in a case of severe palpitation of the heart from dyspepsia.

The *decongestive* and hæmostatic action of hot water have been variously accounted for by gynæcologists. Dr. Pitcher, of Detroit, thought that when applied to a bleeding vessel, the immediate effect is dilatation, which sufficiently slows the current to form a clot; and constriction occurring, afterward, the clot is firmly held and the lumen of the vessel closed.

Dr. Emmet says that the direct result is relaxation of the coat and vascular turgescence; afterward, if continued, reaction follows and contraction occurs.

Carl Ritcher, of Berlin, thinks "the contact of the hot water with the partially denuded inner wall of the uterus causes a slight inflammatory irritation, an œdematous transudation, and a swelling of the tissues, principally the submucous, intermuscular, and perivascular connective tissue, by which the blood vessels become compressed and their lumina thereby occluded."

The action of hot water upon the uterine or gastric mucous membrane or upon abnormally full or bleeding vessels in any part of body, may be readily and simply explained by a well-known physiological principle, viz: That of watching a frog's foot while a needle is drawn across without injuring the membrane. The vessels will presently contract and close, and after remaining so for a few minutes, will dilate to respond no more, or only partially, to such stimulus. With a stronger stimulus, as that of gentle heat, they will again contract, and suchcontr action may be lost a day or two.

Wharton Jones found that cold causes speedy constriction, quickly followed by dilatation.

Beaumont, in his observations on St. Martin, found that the ingestion of cold water was followed by blanching of the gastric mucous membrane, quickly followed by more than normal redness. Now, from whatever cause nausea and vomiting may arise—from the direct contact of an irritant, or the effect of an emetic, or from reflex nervous influences, it is certain in many instances, and probable in all others, that the vaso-motor centers controlling the gastric blood supply are also influenced and gastric hyperæmia produced; and this condition being the link in the causal chain which is broken by the contact of the hot water on the gastric lining, the effect fails to follow. In flatulent distention of the stomach the muscular coat, impeded by the gaseous pressure, is excited to extraordinary work, and the gas is expelled. Patients who begin taking hot water to allay nausea, can not only take large quantities without inconvenience, but get to liking it; and at times, when little or no water can be taken, by drinking it hot, enough can be retained to fully meet the requirements of the organism. This fact has an important bearing in therapeutics. Often in both acute and chronic diseases, the issue depends solely on the amount of work that the kidneys will do. In many diseases, the structure of these organs, though not primarily affected by the morbid process, is liable to damage secondarily. The injury may be due rather to the concentration of the urine—the small amount of water—than to the absolute amount of solids; so that the kidneys become clogged with destructive, effete matter if sufficient water fails to flow through them. But dilution of the urine is not the only good resulting from the free drinking of water. The skin is put to work and carries off a large portion of the effete matter that would otherwise have to pass through the kidneys.—*Dr. Douglas Morton, in Louisville Medical News.*

LACTOPEPTINE IN THE GASTRIC DISORDERS OF CHILDREN.

By AMBREY HUSBAND, M.B., C.M., B.Sc., F.R.C.S., Medical Officer to the Royal Dispensary, Edinburgh.

Of all the disorders to which young children are liable, those affecting the digestive organs are at once the most common and the most fatal. It has been calculated from the Registrar-General's report that one-quarter of the deaths among children under five years is due to diseases of the digestive organs, and this fatality is considerably greater under one year. Passing from these general considerations, I would specialise one or two diseases which, from their constant recurrence, cannot fail to attract attention, and in which I was enabled to watch the effect of LACTOPEPTINE.

The cases were those of rickets, and of so-called infant atrophy with dyspepsia and diarrhœa. The following cases are of this type :

" 1.—C. D., æt. 3. The little patient had all the symptoms of rickets. She had a heavy, stupid look, the chest much contracted laterally, and the bones of both legs and arms much affected. She vomited occasionally. She was ordered 5 grs. lactopeptine after each meal, and under this treatment the child gradually—and then rapidly—improved."

" 2.—M. H., æt. 2. This child was found suffering with symptoms of gastric derangement, colic, vomiting and loss of flesh. As the diet had always consisted of anything that could be obtained from dried cod and cheese, and as there was no chance of providing more suitable food for the child it was hoped that, by the aid of lactopeptine, the diet might be made more digestible and nourishing. accordingly, 5 grs. lactopeptine was given daily after food, and the result was more favorable than was expected, the little patient after a short period becoming quite well.

" 3.—I. M., æt. 7½ years, was evidently of strumous habit, losing flesh rapidly ; felt pain after taking meals. He could not take cod liver oil. There were no chest symptoms. He was ordered 5 grs. lactopeptine three times daily, which was continued for a month, then he was able to take the oil, and speedily recovered.

" The above cases serve to demonstrate the value of LACTOPEPTINE in the treatment of gastric disorders of young children. In two cases of children of a mother in the last stage of phthisis, the lives of the babes were saved by its use.—*Medical Press and Circular, London (Eng).*

THE SWALLOWING OF A SILVER HALF-DOLLAR.

A peculiar case is that described by Dr. C. E. Webster in the *Boston M. and S. Jour.*, May 31, 1883. The coin lodged transversely in a vertical plane, so that a sound could pass it without obstruction, thus giving rise to the opinion that it had passed on into the stomach. The patient died from hæmatemesis, the result of two small ulcerations and consequent perforations into the aorta at the site of lodgment of the coin.

THE CANADA MEDICAL RECORD,

A Monthly Journal of Medicine and Surgery.

EDITORS :

FRANCIS W. CAMPBELL, M.A., M.D., L.R.C.P., LOND.

R. A. KENNEDY, M.A., M.D.

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SUBSCRIPTION TWO DOLLARS PER ANNUM.

All communications and Exchanges must be addressed to the Editors, Drawer 356, Post Office, Montreal.

MONTREAL, JULY, 1883.

THE CHOLERA.

Although it is not probable that cholera will visit Canada this summer, yet in view of its rapid spread in Egypt, its prevalence in India, and its reported presence in London, our sanitary authorities should bestir themselves to prepare the city against its possible advent. By being forewarned, we should in this matter be forearmed, especially when we reflect that in the tide of emigration now pouring into the country, lies the element of greatest danger. Though apparently secure, we must not forget that any day an emigrant ship may bring the cholera to our very doors. A recent article in the *Pall Mall Gazette* gloomily prophesies the rapid spread of cholera over the whole world. The writer, Dr. Jenkins, maintains that two types of cholera, the *Arabian* and the *Indian*, occur in the East. The *Arabian* variety is the one which has hitherto spread over Europe, and, according to Dr. Jenkins, it is this type which is now raging in Egypt. But be that as it may, it is now generally admitted that thorough sanitary organization affords the best means of preventing the entrance of cholera, modifying its virulence, and limiting its spread. To the Government belongs the important duty of securing the careful medical inspection of all incoming vessels, the detention and prompt isolation of suspicious cases, and thorough disinfection of infected vessels ; while upon the civic and municipal authorities devolves the no less important duty of maintaining the sanitary condition of towns and cities as perfect as possible. And it is here in order to ask our Health authorities, what special efforts they are making to improve the sanitary condition of Montreal. Can nothing more be done to remove filth from court-yards and lanes, reform the system of scavenging, and improve the drains ?

Much remains to be done, but, unfortunately, the City Council and Board of Health do not seem to realize the danger or understand what is expected of them, while the sanitary officials are unable to carry out needful reforms, because they are not adequately supported by the civic by-laws. Quite recently a man who has the reputation of owning some of the worst-drained and foulest-smelling hovels in the city was prosecuted by the Health authorities for refusing to remove some open sewer-troughs, which were rendering pestilential the air of a whole court-yard. The facts were undisputed; but, as the law did not quite cover the case, the delinquent was discharged, his pestiferous troughs still remain polluting the air, and he practically defies the Health authorities. Such things should not be, if we expect our sanitary condition to be satisfactory; the Health Department must be sustained in its efforts for the general good, not crippled or embarrassed. If we are to be prepared for the cholera, now is the time to act, not when the epidemic is raging. We commend this matter to the serious consideration of our civic authorities.

FEHLING'S TEST TABLETS.

For the rapid and accurate estimation of Sugar in the Urine of Diabetic Patients.

The methods generally followed in detecting the presence and determining the quantity of diabetic sugar in urine by the use of an alkaline solution of cupric tartrate and other liquid reagents, though in the main giving correct results, are neither convenient nor very rapid of execution, and Physicians, who usually have a large amount of such testing to do, find it especially so.

In compliance with requests from several medical friends extensively engaged in urinary analysis, J. Wyeth & Bro., Philadelphia, are now manufacturing. on a large scale, Compressed Chemical Tablets, representing the solid constituents of the well-known test solution of Fehling, which is that most frequently employed, and yielding by far the most correct results.

Each Tablet is equivalent to 16 minims (1 cc) of Fehling's Solution, and when dissolved in that quantity of distilled water, the Solution is decolorized, with precipitation of red oxide of copper, by the addition of 1-12 gr. (0.005) of glucose contained in urine, &c.

THE TRIENNIAL MEETING OF THE COLLEGE OF PHYSICIANS AND SURGEONS, P. Q.

The Triennial meeting of this College was held in the buildings of the Laval University at Quebec, on the 11th inst. The President, Dr. R. P. Howard, took the chair at 10.30. There were present:—Drs. R. P. Howard, Leonidas Larue, A. G. Belleau, Chas. Verge, Z. Gravel, A. Larochelle, Jos. Theberge, G. B. Lafleur, W. Lamontagne, F. W. Campbell, W. H. Hingston, Jean L. Leprohon, H. Sauve, Wm. Osler, Geo. Ross, T. A. Rodger, J. A. Ross, P. Lachapelle, D. B. Desaulnier, Tancrede Fortier, G. Lachance, Regis Latraverse, C. E. Lemieux, sr., J. A. Sewell, G. O. Beaudry, Jos. Lanctot, N. H. Ladouceur, Arthur Robitaille, A. Marois, Jos. Langlois, V. P. Lavallee, E. P. Chevrefils, Malcolm Guay, G. H. Dufresne, W. Marsden, J. P. Lavoie, Achille Gauvreau, L. Catellier, Geo. Bolduc, E. Gervais, Chs. Gingras, Alf. Dion, N. Lacerte, J. E. Ladriere, J. B. Bolduc, E. A. de St. George, C. S. Parke, S. Gauthier, J. B. Gibson, J. A. S. Brunnelle, David A. Hart, F. E. Roy, Jos. Marmette, Alf. Morrisette, Falardeau, S. Bolduc, Emm. E. Duquette, Edward Belleau, E. Badeau, J. B. A. Lamarche, J. M. Turcot, Gasp. Turcot, Edwin Turcot, J. B. Bolduc, R. F. Rinfret, A. Jackson, F. R. Rinfret, F. D. Gilbert, P. Wells, A. Watters, W. A. Verge, O. Mazurette, J. Marceau, P. A. Shea, M. J. Ahern, F. J. Austin, Henry Russell, V. St. Germain, Luc Beauchesne, M. Fiset, Aug. Hamel, E. Morin, A. Vallee, C. Cote, A. Poliquin, F. X. Gendron, Nap. Lavoie.

The minutes of the last Triennial meeting were read and approved. The Treasurer's report, showing a very satisfactory state of the finances, was read and adopted.

The President then read the following address:

Members of the College of Physicians and Surgeons of the Province of Quebec,—Gentlemen:—The terms of office of the present board of governors of the College terminates to-day, and a short retrospect of the proceedings of the Board during the past three years, and of any events of importance in the history of the institution of which we are all members, may be of some interest to you—and is doubtless expected from me as your presiding officer.

The last triennial period of the College history has not been characterized by any remarkable events. The Medical Act of 1876 (40 Vict. chap. 26), which was the model and basis of the existing

Act, and the joint product of the Medical Board and the Medical Institutions of this Province, was, as you know, further amended, and passed almost exactly in its present form in October, 1879; and its by-laws were sanctioned by His Honor the Lieut.-Governor on the 3rd Sept., 1880. It has been, therefore, the humble but important function of the retiring board during its three years of office to administer the affairs of the college in accordance with "statutes, rules and regulations," which had been just completed and transmitted to it by its predecessors.

One of the first acts of the Board at its first semi-annual meeting was to appoint an officer whose special duty it is to institute legal proceedings against persons infringing the provisions of the Medical Act, and, as will presently appear from the report of that officer, a *systematic* effort has been maintained during the past three years, for the first time in the history of the College, to prosecute persons practicing the medical art without legal qualifications in the Province of Quebec. As a summary of that report I may here state that 49 suits were instituted by the agent of the College; 35 of which were successful, and 9 were lost through want of evidence; 2 through exception to the form; 1 through the plaintiff's lawyer failing to appear in court; and 2 because the defendant *possessed the Governor's* license, and the court was of the opinion that that was a Royal privilege and exempted him from the operation of the Medical Act.

When the many difficulties which attend the establishing of criminality in courts of justice—I was going to say in a legal way, when these many difficulties, some of them legal, some of them ocial, and, I regret to say, some of them of our own making—are borne in mind, it will be admitted that something has been done; at least a good beginning has been made to protect the members of the College in the enjoyment of their professional rights. And I have the hope that with the experience of the present system during the last three years to serve as a guide, this department of the College work will be yet more satisfactorily carried on during the coming triennial period. Mr. Lamirande has collected $367 for registrations, $260 for licenses, and $3,092 for annual subscription—making a sum of $3,719.

From the reports of the Matriculation Examiners it appears that 142 candidates have been admitted to the study of medicine during the last three years. The efficiency with which this important function of the College is performed is proved by the considerable number of young men who are remanded to their studies at the preliminary examinations—and there is little doubt that under the present system the educational qualifications of persons entering upon the study of medicine must gradually attain a higher general average than under the old system.

One hundred and fifty-three (153) licenses to practice in the Province have been issued during the triennial period now under review. One hundred and forty-four (144) of these were given to graduates of the Medical Institutions of this Province; two to licentiates of Ontario; two to graduates from Great Britain; one under clause 24 of the Medical Act to a practitioner over thirty years practice in the Province; and four to gentlemen presenting themselves before the Board for examination. Two candidates for the license were referred to their studies.

A medical tariff adopted by the College, after due consideration, on Sept., 1880, was approved by the Lieut.-Governor in Council on May, 1881; but was repealed by the Provincial Legislature early in 1882, owing to the opposition made to it in some districts by the electors, on the ground that the tariff was too high. The governors resident in the cities of Quebec and Montreal made a vigorous effort to have the Medical Act amended by the insertion of a clause giving power to the members of the College to form distinct associations, which should have the right to make a tariff for their respective districts, subject to approval by the Provincial Medical Board; but this also failed. The Act, however, remains unchanged, and the College has the right to make a tariff subject to approval by the Lieut.-Governor-in-Council.

It is quite possible that hereafter a tariff which shall embrace only a few of the ordinary items, such as visits, consultations, certificates, mileage, etc., may be prepared that shall be acceptable to the Lieut.-Governor-in-Council—*i.e.*, the ministry of the day; but may I be permitted to remind my colleagues that while a tariff under such sanction has important uses, the chief of which is to protect alike the interests of the public and of their servants—the physicians—the profession must after all make its own rate of charges; and there must be no undermining of a brother's reputation, no underselling to attract patients, no contracts for wholesale attendance and cheap medicine; such

practices may do for hotel touters, for representatives of bogus insurance companies, but are unworthy of the members of a liberal profession.

If a medical society were established in the various districts, a fair scale of fees might be agreed upon amongst its members as adapted to the social condition of the inhabitants, and usage would give such scale the force of law, if the members of the profession would favorably assist one another. I do not mean to overcharge, but to charge a reasonable fee for valuable service.

As becomes a body representing the profession of medicine—a profession the constant aim and desire—*raison d'etre* of which is to preserve life, prevent disease, and avert death; the Provincial Board, at its May meeting in 1882, passed a resolution approving of a Bill then before the Provincial Parliament, dealing with the great subjects of Public Health and Vital Statistics, and respectfully recommending the Legislature to give the principles of the Bill its most serious consideration. Perhaps in no way, outside the discharge of their professional duties to their patients, can members of the College and of the Provincial Board do more for the general good than by using their respective personal and official influence with our legislators to pass laws dealing with questions of public health and vital statistics.

During the session of the Provincial Legislature held in 1882 a few amendments to the Medical Act were suggested by the gentleman who was acting as the legal adviser of the College, intended to facilitate the methods of procedure in the courts against persons infringing the provisions of the Act. These amendments will be found in the 2nd, 6th, 23rd, 28th and 32nd sections of the existing Act; and another at the end of section 15, which was based upon a resolution of the Provincial Board, passed at a semi-annual meeting. This last amendment secured the important principle that medical students shall attend a course of lectures during the fourth year of their professional studies, and shall not pass an examination upon the great final subjects of the curriculum until the close of the session of their fourth year.

These several amendments were submitted to the Governors residing in Quebec and Montreal; and having received their approval were introduced by the Hon. Mr. Mercier, and were passed by the Legislature.

A correspondence having appeared in the public papers some time ago to the effect that private examinations are given by Professors connected with a medical school in this Province, and that on these examinations certificates are issued purporting that the bearers are entitled to a diploma, and are in fact medical practictioners, a Committtee of the Governors was charged with the duty of investigating the statements, and it is gratifying to be able to report that no evidence could be elicited to substantiate them, and that the Board unnaimously voted them untrue.

The importance of watching closely the proceedings of the Provincial Legislature has been upon former occasions brought before the College, but the insertion of the following clause in an Act passed last session entitled, " Acte pour amender et refondre l'Acte Incorporant l'Association des Dentistes," etc., is such an obvious disregard of the rights and wellfare of the medical profession in the interests of one or perhaps a few individuals that it ought not to be overlooked in a review of the history of the College during the last three years. The clause is as follows : " Et nonobstant les dispositions de la Section 8, de l'Acte 42-43 Victoria, Chapitre 37, (that is the Medical Act) toute personne pratiquant légalement l'art dentaire depuis dix ans et plus, avant la passation du présente acte, serra par le fait considéré comme admis étudiant en médecine et propre à suivre le cour et subir tout examen requis pour la pratique de la médecine dans les Universités ou Colléges de cette Province en ce conformant aux règlements des dit Colléges ou Universités." That is to say, any person who shall have legally practised as a dentist for ten or more years before the passing of the Dental Act of 1883 shall be exempt from a preliminary examination, and may at once enter upon the study of medicine. That this piece of *modest* legislation was really intended to serve private interests further appears probable from the fact that a letter was received by the Quebec Secretary of the College from a dentist applying for enregistration under the Act in question. I need hardly say that a committee of the College has been appointed to examine and report upon this subject.

The hand of death has not been idle amongst our colleagues during the last three years. Perhaps in no former like period have so many men of mark been removed from our ranks. Several of them have been distinguished as teachers as well as practitioners, and have left their personal stamp upon many of us—such were Francis

Hubert Larue, Jean Gaspard Bibaud, Peter Munro, George W. Campbell, Aaron Hart David, and William E. Scott. Some of them had been presidents of the College, such was the last named, and Joshua Chamberlain and Henry Russell. And some had been governors, as kind old Alexis Thomas Nichaud, Chas. Timothe Dubé. And the following the list of members belongs to that useful and honorable body, the general practitioners of the Province: W. Boswell, Quebec; Ed. D. Belleau, Ste. Michel; J. P. Coutre, Montreal; Philippe Charest, Beauport; Alphonse Deschamps, Montreal; Isaie Demers, St. Jean D'Orleans; Fiset E. P. Morrison, Nicolet; G. E. Fitzpatrick, St. Jerome; L. Ephraim Olivier, Ex. M.P., St. Ferdinand d'Halifax; François Xavier Paradis, Ste. Isidore, Dorchester; Onesime Pelletier, Ex. M.P., St. Charles, Bellechasse; E. H. Paquet, Montreal; Gaspard H. Turcot, St. Hyacinthe.

These our brethren are gone before us, and we are left to carry on their work. Whether it be in watching over the interests of the profession we love, or in teaching the *Ars Medica*, or in the humble but God-like work of healing the sick and relieving the suffering, let us prove faithful to our trust.

It was resolved, that the President's address be printed and circulated amongst the members of the College.

It was then moved by Dr. Osler, seconded by Dr. Lachapelle, that it be a suggestion to the incoming Board of Governors to consider the question of having such changes made in the present method of conducting the elections, that at the next Triennial meeting each separate district shall elect their own representatives. It was moved in amendment by Dr. Fiset, seconded by Dr. Ladouceur, that the mode of election be not changed, but that it be suggested to the new Board that the Medical Act be so amended as to give to each existing judicial district, a number of representatives proportionate to the number of practitioners therein.

A second amendment was proposed by Dr. Gravel, seconded by Dr. Roy. That the practitioners of each judicial district shall elect their own representatives, who shall be chosen from amongst the members resident in such district.

In speaking to the original motion, Dr. Osler explained that this was a matter which had been thought of for some time. That many were strongly of opinion that the change would be beneficial in the way of creating a stronger interest, in the country members especially, in the affairs of the College—in affording an opportunity for the election of a representative by those best acquainted with the merits of the several candidates, and in preventing the control of the election from falling virtually into the hands of a small number of city men. Many of those present expressed similar views, and favored the principle of territorial representation. Great opposition, however, was made to taking any definite action before the matter was once more laid before the general profession. After a long discussion it was moved by Dr. George Ross, seconded by Dr. Brunelle, That the proposals contained in the motions of Drs. Osler, Fiset and Gravel be referred to the incoming Board of Governors, be considered by them, and that a report with their views thereon be submitted at the next Triennial meeting.—Carried.

The ballot was then opened and continued until 5 p.m.

At 8 p.m. the meeting was re-opened. The following were announced as the representatives sent by the various Universities:

Laval University, Quebec.—C. E. Lemieux and J. A. Sewell.

Laval University, Montreal.—E. P. Lachapelle and A. Lamarche.

McGill University.— R. P. Howard and George Ross.

Victoria University.—E. H. Trudel and W. H Hingston.

Bishop's College.—F. W. Campbell and R. A. Kennedy.

Dr. Marsden, on behalf of the scrutineers, read the following list of elected governors:

City of Quebec.—L. Larue, A. G. Belleau, W. Marsden, C. S. Parke, E. A. de St. George and Henry Russell.

District of Quebec.—Lieut.-Gov. Robitaille, Côme Rinfret, Chas. Gingras, Malcolm Guay, P. E. Grandbois, Jos. Marmette and L. T. E. Rousseau.

City of Montreal.—T. A. Rodger and J. L. Leprohon.

District of Montreal.—Jules Prévost, P. E. Mignault, D. A. Hart, N. H. Ladouceur, J. A. Duchesneau, Jos. Lanctot, E. Lafontaine, H. A. Mignault and E. Marcil.

District of St. Francis.—Thos. Larue, F. X. Paré and F. J. Austin.

District of Three Rivers.—D. B. Desaulniers, Hon. J. J. Ross and F. B. Dame.

A vote of thanks was then passed to the retiring president, Dr. Howard, and the late Board of Governors, for the energy and faithfulness with which the affairs of the College have been conducted during their term of office.

A meeting of the new Board was held immediately afterwards, and the following officers were elected :—

President, Dr. C. E. Lemieux; Vice-President for Quebec, Hon. Dr. Ross; Vice-President for Montreal, Dr. Hingston. Secretaries.—Quebec. Dr. A. G. Belleau; Montreal, Dr. F. W. Campbell, Registrar, Dr. L. Larue; Treasurer, Dr. E. P. Lachapelle. Examiners for the preliminary examination, Professors Miller, Howe, Verrault and Laflamme. Assessors.—For McGill University, Drs. Church and E. P. Mignault. For Bishop's College, Drs. Rodger and Leprohon. For Victoria University, Drs. Angus McDonnell and Ladouceur. For Laval University (Quebec), Drs. Marsden and Roy; (Montreal), Drs. John Reddy and O. Raymond.

The Board then adjourned until September next in Quebec.

PERSONAL.

Dr. George W. Nelson (C.M., M.D., Bishop's College, 1879) has been appointed Resident Surgeon to the Central Hospital in Panama, belonging to the Universal Interoceanic Canal Company. Dr. Nelson's many friends will be glad to hear that since going to Panama his health has improved considerably.

W. K. Ross, M.D. (McGill, 1883), of Goderich, Ont., has gone to London to pursue his studies.

Dr. Logan, of Ottawa, has been elected President of the College of Physicians and Surgeons of Ontario.

George Herbert Burnham, M.D. (Trinity, 1875), F.R.C.S. Edin., has returned to Canada, and intends practicing his profession in Toronto as an oculist and aurist.

It is with much pleasure that we congratulate Dr. Osler, Prof. of Physiology in McGill University, upon his election as a Fellow of the Royal College of Physicians of London, Eng. This is the highest honor the profession can bestow. The Canadians who have succeeded in winning this coveted degree are very few.

REVIEWS.

The Dispensatory of the United States of America. By Dr. GEORGE B. WOOD and Dr. FRANKLIN, BUCHER. Edited by H. C. Wood, M.D., Joseph P. Remington, Ph. G., and Samuel P. Sadler, Ph. D., F.C.S. Fifteenth Edition, re-arranged and largely re-written, with illustrations. Philadelphia; J. B. Lippincott & Co., 1883.

It is just fifty years ago since the first edition of the *United States Dispensatory* was published. During the half century which has elapsed it has passed through no less than fourteen editions, and the fate which awaits all men has come to its authors, although one survived to see the issue of the last edition. During all this lengthened period the book has held its place as the standard work of its kind. Its sale has been numbered by hundreds of thousands, and wherever the English language is spoken there it is found. But at last the time arrived when, owing to the wonderful strides made in therapeutics, and the re-arrangement of the *American Pharmacopiæa*, a corresponding change was required in the *Dispensatory*. These changes are found in the present volume, and necessitated the re-writing of a very large portion. This task has occupied the attention of the editors during all their spare moments during the past three years, and a gigantic task it has been, consisting, as it does, of over nineteen hundred pages, a large part of it solid type. A review by us is out of the question. We have, however, given it very careful examination, and an intimate acquaintance with previous editions enables us to say that the present volume is up to date in everything concerning Medicines and their Medicinal uses. It is just one of those volumes which should be in the hands of every Medical man, and a Medical library is incomplete without it.

The Diseases of the Liver, with and without Jaundice, with the special application of Physiological Chemistry to their diagnosis and treatment.—By GEORGE HARLEY, M.D., F.R.S., Illustrated. Philadelphia: P. Blakiston, Son & Co., 1883.

Whatever else Dr. Harley's critics may say, they cannot accuse him of being a copyist; he boldly assails many of the most cherished pathological theories, and in consequence has drawn down upon himself the wrath and indignation of their exponents. He upholds the old classification of—

1.—Jaundice from obstruction,
2.—Jaundice from suppression,

and entirely disagrees with Frerichs, Murchison and Legg, who reject the theory of suppression, and give three causes for Jaundice—

1.—Obstruction,
2.—Abnormal Diffusion,
3.—Diminished Consumption.

While the author is inclined to be dogmatic, his book is readable, and contains much valuable information. This edition, published simultaneously with the London edition, contains the original text and illustrations, and is the only authorized American edition.

Diagnosis of Ovarian Cysts by means of the Examination of their Contents. By HENRY JACQUES GARRIGUES, A.M., M.D., pp. 112. New York: Wm. Wood & Co.

Dr. Garrigues' views are so well known to the profession, particularly to those who take a special interest in Gynecology, that they call for little comment now. The present volume, which is copiously illustrated, gives a full exposition of the author's views upon the subject.

The Untoward Effects of Drugs—A Pharmacological and Clinical Manual. By Dr. L. LEWIN of Berlin. Translated by J. J. Mulheron, M.D. Second Edition, revised and enlarged. Detroit: George S. Davis, 1883.

Another translation of this book made by Dr. W. T. Alexander, and published in 1882 by Wm. Wood & Co., has already been favorably noticed in the *Record.* The publishers of the present volume claim that it is the only English translation having the Author's endorsement, and that, having been revised and corrected by Dr. Lewin before being issued, it is virtually a second edition.

A Manual of Histology. By THOMAS E. SATTERTHWAITE, M.D. Second edition, enlarged and revised. New York: Wm. Wood & Co.

A few alterations have been made in the text, and a short appendix added, treating of the lymphatic system and the salivary glands. We can only repeat the favorable opinion expressed when noticing the first edition, and commend it in its revised form as one of the most useful manuals of Histology published.

The Transactions of the American Medical Association. Instituted 1847. Vol. xxxiii. Philadelphia, 1882.

This volume contains the proceedings and papers of the meeting held at St. Paul's, Min., in 1882. Some of the papers are full of interest, and one or two are beautifully illustrated by Micro-Photographs.

The Lectures on the Physiological Laws of Life, Hygiene, and a General Outline of Diseases Peculiar to Females, with seventy-seven illustrations. By H. S. Cunningham, C.M., M.D., Member of the College of Physicians and Surgeons, Province of Quebec. First Edition. Indianapolis, Indiana, George F. Borst & Co., Publishers, 1883.

Dr. Cunningham is a man of clear intellect, and has succeeded in producing a book intended for families in the country, which, while not free from faults, is exceedingly creditable to him. It is not the function of a purely Medical Journal such as ours to criticise a work of this description; some may even deny their necessity. The world, however, would seem to require them, and, though we have known cases when dependance on them has resulted in harm, we must in justice also add that we also know many instances when the timely application of rules laid down in similar books has effected good. The interest of Canadians will be increased in the work by knowing that its author is a Canadian graduate.

Brain Rest. By J. LEONARD CORNING, M.D. New York: G. P. Putnam's Sons, 1883.

This little book treats of an important subject in an interesting manner. The author points out the value of periodicity in sleep, and insists upon a due amount of sleep, and a regular hour for retiring, "*as soon after sunset as possible.*" He lays down the rule never to thwart the drowsy impulse, which in health should recur about the same time every night. He describes fully his own method of inducing sleep by applying instrumental compression to the carotids, thus mechanically regulating the cerebral circulation. While we do not agree altogether with the author's pathology or some of his therapeutic recommendations, there is much in his book which is instructive and suggestive.

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MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

Stated Meeting, May 25th, 1883.

R. A. KENNEDY, M.D., PRESIDENT, IN THE CHAIR.

The following resolution was passed :—

Resolved,—That this Society has heard with deep regret of the death of Dr. W. E. Scott, one of its oldest and most respected members,—a prominent member of the medical profession, a representative governor of the Province for many years, a well-known and successful teacher, as well as an energetic surgeon and practitioner, and feels sure that his loss will be widely felt and much deplored.

Resolved,—That this Society extends its deepest sympathy to Mrs. Scott and her family in their affliction, and that a copy of these resolutions be sent to Mrs. Scott and to the press.

DR. OSLER exhibited an *Aneurism of the Anterior Cerebral Artery*. There was meningeal hæmorrhage about longitudinal fissure, and at the base. On separating the median surfaces of the hemispheres, and clearing the blood away, a small nodular projection was seen on the right side just about the middle of the convolution of the corpus callosum. On further dissection this proved to be a small aneurismal sac, on a branch of the anterior cerebral. It was embedded in the sulcus between the gyrus fornicatus and precuneus, and the substance about it was lacerated. The rupture was at the edge of the sac, and of considerable size. In the white matter, half an inch beyond the aneurism, there was a round, well defined spot of hæmorrhage, the size of a cherry. Dr. Bell said the above was removed from a boy six years of age, who had been brought to hospital in an unconscious condition; with feeble pulse, pale face, eyes and head turned to right and left hemiplegia,—he remained so till death, six hours later; no wound was found. Some time before he had been run over by a baker's cart, which left him halt in his left leg. Three weeks before his last accident he had fallen from a hay loft. Nothing followed this but drowsiness for a short time.

Uterine Fibroid Polypus.—DR. GARDNER showed this specimen which he had removed from the posterier surface of the uterine wall close to the inner os. Very slight hæmorrhage followed, which was easily stopped by tr. iodine. Dr. G. T. Ross, whose patient the woman was, gave the following particulars: Mrs. L. had been married ten years, no children; had good health till two years ago, when she began to suffer from dysmenorrhœa. Had also more or less pain throughout pelvis, and radiating down right thigh. About six months ago menorrhagia set in, and more recently the flow became continuous, alternating occasionally with a watery discharge from uterus. She became markedly anæmic, and complained of uterine tenesmus. An examination revealed the above tumor projecting from the os.

Dr. Roddick exhibited a photograph and cast of a case of extremely varicosed condition of the veins of the leg operated on successfully by Dr. Malloch, of Hamilton, by excising portions of the affected veins, and by carbolic injection.

Dr. Kennedy shewed photographs of Barnum's alligator-skinned child, at the birth of which Dr. Kennedy attended the mother. He said it was an ordinary labor, but the baby's skin was as if varnished, but presented no cracks or creases, and the child could not open its eyes; he ordered it to be rubbed with Cod Liver Oil. Dr. Kennedy lost sight of his patient, as the parents soon after left the city. Dr. Fox, of New York, seeing such a beautiful specimen of Ichthyosis at Barnum's Show, wrote to Dr. Kennedy for information about the history of the case.

Lawson Tait's Operation.—Dr. Gardner exhibited a set of uterine appendages (ovaries and Fallopian tubes) which he had removed a week previously. The ovaries were somewhat enlarged, and contained several cysts, one of them being three-quarters of an inch in diameter. The Fallopian tubes were slightly distended with a catarrhal secretion.

The patient was a charwoman, æt. 36, unmarried, never pregnant. Began to menstruate at 17; flow always copious, with clots, and attended with hypogastric pain. Otherwise she had fair health till a few years ago, when, after reaching overhead to wash a ceiling, she suffered increase of pelvic and lumbar pain, with "painful sitting" and aggravation of the dysmenorrhœa and menorrhagia. When patient first came for advice menses had continued for a month. Examination revealed a small, circular os uteri, with a bulky, completely retroverted uterus, measuring 3½ inches. The channel was tortuous. Marked tenderness around uterus, with thickening felt in posterior cul de sac. After dilatation with a small laminaria tent, a fibro-cellular polypus of the size of a cherry was discovered hanging through the internal os, attached by a pedicle further up. This was removed, and the curette then passed over the whole endometrium, bringing away a quantity of soft granulation-like tissue. Immediately afterwards the endometrium was swabbed over with Churchill's tinc. of iodine. The uterus was then replaced, and an Albert Smith pessary introduced. Hot vaginal douches were prescribed and rest in bed enjoined. No relief followed. The next two periods were profuse, with clots and pieces of membrane, found by microscopical examination to be the uterine lining membrane. She was then treated for some weeks by careful tamponing of the vagina with cotton soaked in glycerine, with iodoform. This gave temporary relief, but menstruation continued to be excessively painful, and attended with vomiting and great general prostration. Oophorectomy was proposed as a *dernier ressort*. The patient eagerly grasped at the idea of any expedient that gave a prospect of relief; so, on the 18th of May, nine days after the cessation of menstruation, the operation was done. No difficulties were encountered. The ovaries and tubes were not adherent. They were easily raised between the edges of the abdominal wound, ligatured, and cut away. A good deal of abdominal pain and incessant vomiting were suffered for a few days. Temperature in the vagina never rose over 102°F. The patient was kept profoundly under the influence of opium (Battley's sed. solution) given hypodermically, and nourished exclusively per rectum for a week. Only smal pieces of ice given by the mouth. The menses, or a metrostaxis of blood of dark cherry-red color, appeared on the second day, lasting four or five days. The abdominal incision united perfectly. After the first week, recovery, though slow, was steady. The patient, who had been a terrible sufferer from indigestion, was much improved in this respect, as in many others. Defecation, which formerly was agonizing, now almost painless. Chloasma (uterine), formerly most marked, now disappearing fast. All the symptoms much mitigated.

June 17th.—A month since operation. Improvement in all symptoms. It is slow as regards pelvic pain. This symptom, depending as it does on pelvic peritonitis, metritis and endometritis, cannot disappear entirely for some time to come.

Dr. Trenholme said he was the first to perform this operation in Canada. His patient is now enjoying good health, and has not menstruated since. He believed the operation ought to be done oftener than it is.

Dr. Roddick asked if it were not possible to make the operation less serious, by merely ligating the Fallopian tubes between the uterus and ovaries, and then cutting them through, which operation could be done with a very small opening in abdomen.

Dr. Gardner said no, for it might produce gangrene or septic peritonitis, and often the ovaries are in a bed of inflammatory exudation.

Dr. Trenholme said the operation might be performed through the vagina if there were no adhesions.

Dr. Osler was surprised to find that ovaries so slightly diseased required such heroic treatment.

Dr. Gardner said the operation was indicated even if the ovaries were healthy, for you remove the organs which are the cause of all the monthly symptoms. His case was not ovarian, but uterine dysmenorrhœa.

Dr. F. J. Shepherd read the following paper on *Two Cases of Wound of the Palmar Arch:* Perhaps there are no more troublesome cases to treat, or ones that give rise to greater anxiety, than wounds of the palmar arch. If treated properly, as a rule, these cases terminate favorably, but even with the most skillful treatment serious results sometimes follow. It seems extraordinary how often wounds of the palmar arch are badly treated, when every text book in general and minor surgery gives such definite directions as to what should be done. But a case is brought to the surgeon where there is a small wound in the ball of the thumb which has bled freely at first, but now the hæmorrhage is arrested, and he probably merely applies dressing, with perhaps a small compress, and sends the patient away; in a day or two when the clot breaks down, profuse hæmorrhage comes on (possibly at night), and before a surgeon can be found the patient has lost a great deal of blood. Now a compress may not arrest the bleeding, and the brachial artery may have to be tied to save life, or the forearm may in worst cases have to be amputated. These serious results would not have happened had the surgeon in the first instance enlarged and thoroughly cleansed the wound, plugged it from the bottom with lint, placed a compress in the palm of the hand, and bandaged the whole firmly and evenly, and then left alone for three or four days. Very often the wound is plugged, and a compress and bandage applied; but the anxiety or overofficiousness of the surgeon prompts him to examine the wound daily, to see that everything is all right. This disturbs the parts and oozing commences, which cannot be arrested by the most careful pressure, and in consequence the serious operation of tying the brachial has to be resorted to. The truth of the old axiom that "meddlesome surgery is bad surgery," cannot be too often insisted on. When the wound is once plugged and properly bandaged, it should be left undisturbed for at least three or four days, if the pain or discomfort is great, morphia should be administered to allay it; but on no account should the wound be disturbed. In exceptional instances the plug causes a grangrenous condition of the wound, or a diffuse cellulitis is developed, and the surgeon may have to resort to amputation to save life. I shall now relate two cases which came under my observation during the past year, and which fortunately terminated favorably, though at the time they caused me much anxiety.

Case I.—J. S., aged 15, while washing bottles fell with one in his hand. The bottle broke, and cut him severely in the ball of the left thumb, a little to the ulnar side and parallel to the first metacarpal bone. There was considerable hemorrhage at the time, which was controlled by a tight bandage round the arm. In this condition he was brought to one of the hospitals; as there was no hemorrhage from the wound, it was not explored, but a couple of stitches were put in and the wound was dressed with dry absorbent cotton, kept in position by a light bandage. The boy was then sent home. This happened on Tuesday, March 7th, 1882. The dry dressing was left on till Saturday, the 11th, when, as the wound was suppurating, it was removed and replaced by water dressing. On Saturday night profuse hemorrhage suddenly set in from the wound. The boy was brought to the General Hospital as quickly as possible, and one of the house staff controlled the hemorrhage (temporarily) by means of a cork compress and tight bandage. On Sunday evening there was slight oozing, but very little blood was lost till next morning, Thursday 13th, when the hemorrhage became again profuse. I saw him now for the first time. The bleeding was controlled by an Esmarch bandage, and the wound was examined. It was found to extend through the ball of the thumb down to the bases of the metacarpal bones of the thumb and forefinger, which could be felt quite bare. On cleansing the wound and loosening the Esmarch, no bleeding point could be discovered, as the tissues were much infiltrated with effused blood, which also welled up from the bottom of the wound. The Esmarch having been again applied the wound was thoroughly cleansed, and plugged from the bottom with a firm cone of absorbent cotton, soaked in carbolic oil (1-16), over

which was placed some lint folded square and dry absorbent cotton. The whole was kept in position by a short flat stick, placed across the palm and held firm by a figure eight bandage going round the two ends of the stick, and over the back of the hand. By this means good counter pressure was effected. The hand was now closed on the palmar pad and stick and bandaged firmly; the bandage was continued to near the elbow (which was flexed) and then carried round the forearm and arm, so that the elbow was fixed in a position of extreme flexion. The boy was sent home to bed, and a quarter of a grain of morphia was prescribed. The hand was left in this position for four days, during which time the boy's temperature kept at about 100½° F. There was considerable pain of a throbbing character, but a quarter of a grain of morphia at night always procured sleep. The bowels were kept open with calomel; at the end of the fourth day, an Esmarch having been applied to the forearm, the wound was examined, and the plug of cotton wool removed. It came away quite easily and was bathed in a healthy pus; the bottom of the wound was granulating freely. The skin in the neighborhood was perfectly healthy, with the exception of a small spot on the inner edge, from which a slough came away in a day or two. As there was much pus between the first and second metacarpal bones, and the only tissue at that point between bottom of the wound and the back of the hand was a thin skin, an incision was made through it, and a short drainage tube introduced. On loosening the Esmarch no hemorrhage took place. The large hole into which the wound was now converted was filled with absorbent cotton soaked in carbolic oil, and the hand was placed between two splints, well padded with absorbent cotton (dry), and carefully and firmly bandaged, and slung across the chest. That night the boy slept well without an opiate, and the case thenceforward progressed most favorably, the large cavity taking, of course, some time to fill up, which it did from the sides principally. After the first dressing, cotton wool saturated with iodoform was substituted for the carbolic oil dressing, and had the remarkable effect of almost preventing suppuration. By April 7th the wound was completely healed. When last seen the boy had only a little stiffness of the thumb. The cicartix was not very noticeable.

Case II.—E. C., butcher, aged 58, whilst sawing a meat-bone, accidently cut his left thumb with the saw, on the back of joint, between 1st and 2nd phalanges. He paid little attention to the wound, and merely kept it tied up with a piece of rag, but after seven or eight days the wound began to inflame, and poultices were applied. I saw him for the first time two weeks after the receipt of the injury (Sept. 12th, '82). At that time the whole hand was œdematous, the thumb greatly enlarged, boggy to the feel, and covered with an erysipelatus blush. The wound was discharging a stinking pus. Temperature 102°F.; pulse 104. On examining further, it was found that the pus had burrowed up in the inner side of the thumb as far as the middle of the metacarpal bone. Two deep incisions were made, the one in the inner side of the first phalanx and the other on the back of the metacarpal bone, and a large quantity of pus was evacuated. The cavity was washed out with a 1 to 20 solution of boroglyceride and a drainage tube was put through the two incisions from the upper to the lower, and the thumb was dressed with lint soaked in boroglyceride; a well padded splint was placed on the palmar surface of the hand, and the whole evenly and firmly bandaged with a gauze bandage. On re-dressing the hand two days after this (Sept. 14) and withdrawing the tube, a free bleeding took place, the bleeding point not being found on enlarging the wound. It was plugged with cotton soaked in boroglyceride and glycerine, equal parts; over this a pad of boracic lint was placed, and the whole firmly bandaged to a pasteboard splint. By this means the hemorrhage was completely controlled. On removing the dressing three days after, the plug came away easily, and was bathed in healthy, sweet pus. No hemorrhage occurred. The hand looked much better, was reduced in size, and no erysipelatous blush was present. Temperature and pulse normal. Wound dressed as before with boroglyceride solution. The dressing was changed every third day, and all went well for more than a week, when suddenly an alarming hemorrhage occurred whilst he was straining at stool. The loss of blood was so great that he fainted. The friends partially arrested the hemorrhage by tying a silk handkerchief around the wrist. I was immediately sent for, and on arriving at the house I put on an Esmarch bandage and examined the wound. I again enlarged it, and cleaned it of clots, but on loosening the bandage, could not detect the bleeding point. The blood seemed to well up from the bottom of the wound, which extended the whole length of first phalanx. I reapplied the Esmarch, cleaned

the wound of clots, and plugged it firmly from the bottom with lint soaked in equal parts of boroglyceride and glycerine, and bound the hand and thumb firmly on a splint, well packed with boracic cotton. I also put a compress over the radial artery, near the wrist, and kept the hand against opposite shoulder. The dressings were left on for four days, at the end of which time the patient had a severe rigor, followed by a temperature of 104° F. I then removed the dressings and let out about an ounce of perfectly sweet pus. The wound was redressed with boroglyceride, and covered with a pad of boracic cotton, the splint reapplied, and the whole kept in place by a firmly and evenly applied gauze bandage. No hemorrhage occurred after removal of the Esmarch, which was applied during the dressing; and from this time forward the case progressed favorably, the wound granulating from the bottom.

No doubt, in this case, the drainage tube ulcerated through either the princeps pollicis artery or a branch from the radial, which so often passes over the web of the thumb to complete the superficial arch, and which is also connected with the deep arch by a short trunk. Fortunately, by the thorough drainage the cellulitis had been controlled before the severe hemorrhage came on. The second hemorrhage was due no doubt to the displacement of the clot by the straining at stool.

Testis in perinæo—Dr. R. L. Macdonnell related the case. The patient is 15 years old. The left testicle has rested in the perinæum from the time of his birth. It is situated slightly to the left of the ano-scrotal raphe, rather nearer the anus than the scrotum. The organ is well developed, and freely movable. It can be put into its proper place, but cannot be retained there. The scrotum is not so well developed on the left side as upon the right. There is left inguinal congenital hernia. The boy has been under observation for the last five years. He is said to have been born prematurely at the sixth month, and up to the present time has been very delicate, but the deformity has, as yet, caused him no inconvenience.

Nitro-Glycerine in Epilepsy.—Dr. F. W. Campbell spoke of the good effects of a one per cent. solution of nitro-glycerine in two cases of epilepsy. The first was a young woman who used to have an attack every four or five weeks; occasionally would be free for about two months. Gave her one drop three times a day, since which time (Dec. 16) has not had a single attack. The second case was a man whose attacks varied in frequency from three or four a day to one in two or three weeks. Three months ago put him on one drop doses three times a day. He has not had an attack since.

Dr. Henry Howard asked if these were cases of pure epilepsy, because the nitro-glycerine treatment has not proved to be of much use in true epilepsy—that is, where there is loss of memory and micturition during the seizure.

Dr. Campbell did not know if his patients micturated, but believed they were true epileptics.

Dr. Henry Howard said that according to modern alienists, loss of memory and micturition must be present else it is not true epilepsy, and the treatment of most use in these cases is tying the internal carotid. This is useless in the pseudo cases.

Dr. Kennedy mentioned having had good success in one case of epilepsy with 10-grain doses of borax three times a day.

Progress of Medical Science.

THE FREQUENT REPETITION OF DOSES.

A lecture delivered at the Bellevue Hospital Medical College, by A. A. Smith, M.D., and published in the *Medical Record.*

Gentlemen:—I propose to direct your attention this morning to the subject referred to at my last lecture, namely, the frequent repetition of doses. This subject is a very important one, and one regarding which it is very difficult to establish any arbitrary rules. In the case of chronic diseases, where it is necessary to continue the treatment for a long time, the plan of administering the medicine in larger doses at intervals of five or six hours is probably the best one which can be adopted. For example, if you were prescribing some preparation of iron in a case of anæmia, it would be unnecessary to give it oftener than th times daily. Again, in certain cases it may be desirable to produce the full effect of the drug at a single dose, as in the administration of a cathartic, or of quinine to reduce temperature.

In other cases, however, it is desired, in administering medicinal remedies, to keep up their continued effect, and the question arises, whether we can accomplish this purpose better by giving them in smaller doses at frequent intervals than by giving them in large doses at much longer intervals, the total amount of the drug in the end

being, perhaps, the same in either case. It is a fact with which you are acquainted that certain drugs become absorbed and produce their effect upon the system in a very short time, and they may also be eliminated very rapidly, while others act slowly, and are eliminated after a longer interval.

It is not my intention this morning to deliver a scientific lecture; I shall make certain treatments based upon clinical facts for which I shall not attempt to give any explanation.

The first drug to which I would call attention in connection with the subject of the lecture is the chlorate of potash. It may not be unknown to most of you that this drug has at times been administered in sufficiently large doses to produce a dangerous inflammation of the kidneys. Special attention has been called to this fact by Dr. Jacobi of this city, and also by other authors. This danger can be avoided by administering the drug in small doses frequently repeated. In writing the prescription, a teaspoonful of the solution may be made to represent as much of the drug as you wish to give; or, if it be in a more concentrated form, the patient may add water to it. Grain doses given every half-hour in scarlet fever, diphtheria, tonsillitis, etc., will produce the same results as larger doses, without the danger of the evil effects resulting from the accumulation of the drug in the system, as sometimes happens when it is administered in the ordinary way. Indeed, I believe they will produce better results upon the throat inflammations.

For the treatment of neuralgia, croton chloral has for a long time been given in large doses, as from five to eight grains, repeated every two hours, until fifteen grains are taken. But allow me to suggest what I consider a better mode of administering the drug—that is, to give a grain of it, prepared as you please, either in liquid or pill form every half-hour until the neuralgic symptoms are relieved. A solution of which a teaspoonful represents a grain of the croton chloral may be made, having scarcely any of the bad taste which usually belongs to this medicine when given in large doses. I may here remark that one of the important advantages connected with the frequent repetition of doses is the fact that the medicine may be so largely diluted with water or other vehicle as to be rendered comparatively tasteless, and harmless to the mucous membrane of the stomach.

You will often be called upon to treat very obstinate cases of urticaria, and you will be put to your wits' end to know what to do. The plan ordinarily suggested is to give alkalies, as the bicarbonate of sodium, or magnesium; but, if you will give the patient two grains of the salicylate of sodium every hour or half-hour, you will usually be enabled to effect a cure even in obstinate cases, except those of a chronic nature. Two grains of the salicylate of sodium administered in a teaspoonful of water is almost tasteless, and may be given without producing disturbance of digestion. Urticaria is often caused by the administration of full doses of balsam of copaiba in cases of urethritis, or inflammation of other mucous membranes, and it may seem strange to you when I make the statement that a single drop of the same drug given every half-hour will sometimes control urticaria. I have no explanation to offer, but I make the statement not alone upon the authority of others; I myself have observed the efficacy of the treatment, although not so frequently as in the treatment by the salicylate of sodium.

Fowler's solution, or the liquor potassii arsenitis, half a drop given every half-hour for six or eight doses, will often relieve the vomiting which occurs after a debauch. It will also relieve the morning vomiting of drunkards, and is of decided benefit in the sympathetic nausea and vomiting of pregnancy.

Jaborandi has been given in large doses with a view to exciting perspiration in cases of Bright's disease, but the very serious objection has been found to its administration in this manner, that it sometimes has a very depressing effect upon the heart's action, resulting in some cases fatally. Now, five to ten minim doses of the fluid extract of jaborandi given every hour or half-hour will produce marked perspiration without causing any unpleasant effects upon the heart. I sometimes combine with the jaborandi the tincture of digitalis, with a view to counteract any possible influence which the former drug may have upon the heart. So dangerous do I consider large doses of jaborandi that I often hesitate long before administering it, especially in the uræmia of the puerperal state.

You will please remember that the amount of the medicine administered is not so small as you may at first suppose, especially if you take into consideration their strength and the frequency of their repetition.

The next preparation of which I shall speak is a solution of the sulphate of atropine, one one-hundredth of a grain in a goblet of water, a teaspoonful of which shall constitute a dose, amounting in all to about sixty doses. Now, you will often be called to see cases of supposed croup, but which, in the majority of instances, prove to be cases of false croup of a reflex origin. Ordinarily, you will be able to relieve these patients by giving them a teaspoonful of this preparation every hour. It is possible the remedy acts slightly as a stimulant of the respiratory centre; it is also possible that it has some influence upon muscular contraction or relaxation; at all events, clinical experience proves that it is of benefit in these cases. The dose may be repeated every hour or half-hour, according to the severity of the attack. If the child's face begins to flush and show signs of the physiological effects of the drug, the dose can be reduced in frequency. It should be remembered that when thus administered the equivalent of a full dose of the drug will soon be reached. Do not forget in these cases to give an emetic if there is anything

in the stomach which may be causing the spasm, or a cathartic if there be reason to suspect intestinal disturbance as the cause.

The bromides are largely used in the treatment of the nervous and febrile disturbances of children, but an objection to them is the fact that the little patients do not take them readily, because of the taste; the bromide of sodium is, perhaps, as little disagreeable as any of the preparations. This objection can be avoided by giving small doses frequently repeated; for instance, a few grains dissolved in half a tumblerful of water, a teaspoonful representing a half-grain, or a grain even, administered every ten or fifteen minutes. When given in this manner, the bromides often prove of great benefit in the nervous disturbances arising from dentition and other causes, and in relieving the fever which, in children, usually attends a slight degree of excitement of any kind. I have seen an elevation of the temperature in children where it could not be traced to any other cause than the excitement incident to their afternoon play. A temperature which might indicate a sickness of considerable gravity in the adult, if it occur in a child may be of comparatively little importance. In such cases the bromides, administered in small doses, say a grain or two at intervals of ten or fifteen minutes, will often prove of great benefit.

I began the use of some of these remedies administered in this manner on the recommendation of others, and I must say in a somewhat skeptical frame of mind, thinking that the effect which they produced was probably due to the moral influence upon the patient, or that it had no foundation in fact, it being a mere coincidence that the drugs were administered at a time when the patients would have recovered in the absence of any treatment; but, having seen any benefit follow their administration repeatedly, I concluded they must have a wider range of usefulness, and began to use them much more frequently.

You will often meet with children of a nervous, excitable frame of mind, who are, perhaps, naturally of a sensitive, nervous temperature, who are disturbed by the slightest noise, and are unable to go to sleep before ten or eleven o'clock at night. In such cases you will find it necessary to give a nervous sedative. An excellent effect will be produced by chamomilla in some one of its forms, as the tincture, administered in minim doses, every fifteen or twenty minutes. It is tonic as well as sedative. It is a better sedative in such cases than the hydrate of chloral, which is liable to affect the digestion. It is harmless when given in largre doses. Put a teaspoonful into a half-tumblerful of water, and let the child drink it freely.

One of the most important remedies which can be administered with great benefit in frequently repeated doses is ipecac. You are aware that a teaspoonful of the syrup of ipecac is likely to produce emesis; but it is also a fact, regarding which I was at first quite skeptical, that a single drop of the wine of ipecac will often arrest obstinate vomiting. It should be repeated every ten or fifteen minutes. When administered in this manner, I have often known it to relieve vomiting from different causes, among which are pregnancy and subacute gastritis. Children often vomit from very slight causes, and are liable to suffer from diarrhœa and vomiting which have no other assignable cause than disturbance of digestion. A single drop of the wine of ipecac, repeated every fifteen or twenty minutes, will often produce the most marked relief, both from the vomiting and the diarrhœa. Administered in this manner, the drug is not nauseous, and is easily taken.

I now make a statement, upon the authority of Trousseau and his enthusiastic successor, which may appear to you, as it once did to me, incredible—viz., that one-sixtieth of a grain of calomel taken every hour for ten or twelve hours will relieve the headache of syphilis occurring at night. I have administered it in one-fortieth-grain doses in this manner, and have obtained the results which they claim for it, but I have not yet tried it in sixtieth-grain doses. The relief was very marked by the second or third night. It is not intended to take the place of iodides which are given in such cases. Doubtless the calomel, when administered in such small doses, is all taken up into the system.

Nursing children often vomit or regurgiate their food; this has been relieved repeatedly in my experience by giving them a tablespoonful of a solution of one grain of calomel to the pint of water every ten or fifteen minutes. In order to dissolve it, the calomel should first be put into an ounce of lime-water, and then into the pint of pure water. One twenty-fourth of a grain of mercury with chalk, administered every fifteen or twenty minutes, is often of great benefit in the vomiting and non-inflammatory diarrhœa of children. Where the diarrhœa is accompanied by mucous passages, indicative of a certain degree of inflammatory action, or enteritis, benefit will be derived from the administration of one teaspoonful of a solution of bichloride of mercury (corrosive sublimate), one grain to the quart, every hour. The dose may seem very small, but it must be remembered that the dose for an adult is only one-sixtieth to one thirtieth of a grain, and, when administered in this manner, the full dose for a child is reached within a few hours.

Another extraordinary statement, which at first seemed to me to be fabulous, and may seem so to you, but which nevertheless, you will find to be based upon clinical facts: Put a grain of tartar emetic into one quart of water; teaspoonful doses of this solution every half-hour will prove effectual for the relief of the wheezing and cough accompanying a slight bronchitis in children.

A single drop of the tincture of nux vomica given every ten minutes will often produce most marked relief in sick headache not of a neurotic origin. It should be given immediately after or soon after meals.

It is well-known that cantharides, when given in large doses, is liable to cause inflammation of the urinary tract; but it has been found that a single drop of the tincture every hour will in many cases relieve vesical catarrh.

You probably have heard that digitalis has been used in cardiac disease. Certainly if you have not heard of it you will, and, if you have already heard of it, you will hear of it again, particularly at the clinics. Ordinarily, it is administered in considerable doses only three or four times a day; but I do not hesitate to say that the frequent repetition of small doses will produce much more benefit than larger doses at longer intervals. A single drop of the tincture of digitalis, given to a patient suffering from symptoms due to organic heart disease when digitalis is indicated, administered at intervals of an hour or half-hour, according to the severity of the symptoms, will often give greater relief than larger doses, and without liability to ill effects.

For the diarrhœa of children, accompanied with slight inflammation, straining, and the passage of jelly-looking matter, but not true dysentery, five drops of castor-oil, given every hour in water with sugar and gum, is an excellent remedy.

A gentleman in this city, of authority in the specialty of venereal diseases, says he has given greater relief in a short time, in cases of orchitis and epididymitis, by the administration of two-minim doses of the tincture of pulsatilla every hour than by any other mode of treatment. I can testify to the great benefit derived from the drug administered in this manner in dysmenorrhœa not of a membranous, obstructive, or neuralgic character.

One of the most distressing symptoms from which many women suffer at the menopause is flatulence, and a sensation of fluttering or palpitation at the pit of the stomach, an effectual remedy against which is the extract of calabar bean in one-fiftieth-grain doses, repeated every half-hour for six or eight doses. It may be repeated in the same way after stopping it for three hours.

In cases of amenorrhœa not dependent upon anæmia, benefit may be derived from minim doses of the fluid extract of ergot administered every half-hour for five or six hours the day before the flow should begin, and again on the day on which it should occur. Contradictory as it may seem, when administered in the same manner the fluid extract of ergot is of benefit in cases of excessive menstruation.

Aconite is one of the drugs to which you will probably have occasion to resort frequently when you enter upon the active practice of medicine. It has for a long time been used in quite small doses, but not so frequently repeated as it might be with benefit. There are many cases of febrile movement, with dry, hot skin, a full, bounding pulse, the mucous membrane of the throat and nose probably dry—cases in which the febrile movement is not the commencement of one of the continued fevers; the tincture of aconite, one-third to one-half a minim given every fifteen minutes will be found of decided benefit. Visiting the patient shortly after the commencement of this treatment you will often find him in a little perspiration; the medicine may then be administered at longer intervals, every half hour or longer, according to the indications. The tincture of aconite, administered in a similar manner, is also useful in cases of commencing so-called cold in the head. It is likewise useful in cardiac hypertrophy with palpitation, severe headache, and disturbances of the nervous system due to increased force of the heart-beat.

Two minims of the tincture of hamamelis every half hour will often control hæmorrhages. I was at first inclined to look upon this statement with a great deal of distrust, but I have since tried it in cases of hæmorrhage from the nose, from the uterus, and in the hæmorrhage from hæmorrhoids, and have found it of great benefit.

The tincture of belladonna in minim doses, given every half-hour, is a good remedy in cases of nasal catarrh, and bronchitis accompanied by free secretion. You should cease to give the drug for a while after eight or ten doses have been administered, as it is less quickly eliminated from the system than the other medicines of which we have already spoken. In cases of pulmonary œdema with failure of heart power, belladonna thus administered is of benefit in retarding the exudation of serum, and in overcoming the failure of heart power.

Two grains of the chloride of ammonium, combined with ten or fifteen minims of the tincture of cubebs, given every half-hour, oftentimes controls acute pharyngitis and superficial inflammations of the other tissues about the throat. For inflammation of the throat dependent upon a gouty diathesis, add to this mixture ten minims of ammoniated tincture of guaiac, and administer every hour.

In the headache of migraine, one grain of the citrate of caffeine given every half-hour will often produce most marked relief.

In neuralgias about the face or head, three-minim doses of the tincture of gelseminum every half-hour will often act almost miraculously and leave no ill effects.

For certain kinds of headaches (especially those which are periodical and not of malarial origin), fifteen-minim doses of fluid extract of guarana given every fifteen minutes will very frequently relieve. If it does not relieve in four doses, increase the dose to thirty minums.

THE TREATMENT OF FRACTURES IN BRITISH HOSPITALS.

There is, perhaps, no other province in the wide domain of surgery, in which similar and equally satisfactory results are so commonly brought about by a variety of means than in the treatment of simple fractures of the limbs. And this is the case, not because any great diversity of opinion exists as to the end that is to be desired, for that cannot be alleged in this particular instance, but rather because the result sought for is in all cases identical, though capable of being accomplished by very many forms of treatment, which differ in this detail, and allow scope for the ingenuity and dexterity of the individual surgeon.

Fractures of the limbs are so common, that it is not a matter of surprise that we find at each institution some recognized method, which is sanctioned by custom and hallowed by time, for meeting all the more common forms of each injury, whilst any complication that may be found needs generally but a very slight modification of the apparatus. And this is rendered all the more necessary seeing that such injuries, except when complicated by some serious addition, such as severe injury to a joint or rupture of an artery, are treated in the first instance by the house surgeon, and the surgeon on his visit is rarely called upon to do more than approve, or at most to suggest some slight alteration in the apparatus.

Except there be some other injury, or on account of the feebleness of the patient, or in the event of some serious complication to a joint or artery, cases of fractures of the upper extremity are usually treated as out-patients, thus coming entirely under the care of the house surgeon and his dressers, and this renders it necessary that a convenient and portable apparatus shall be applied to keep the ends of the injured bone in good apposition. It would be impossible to enumerate the many ways in which fracture of the clavicle is dealt with, or the many ingenious appliances which have been invented by surgeons and instrument makers; but speaking only of hospital practice, the result obtained by a simple bandage with or without a pad in the axilla, and applied so as to throw back the shoulder upon the injured side, to raise and keep steady the humerus, and to take off the weight of the arm, are as satisfactory as could be wished for. Sometimes the figure-of-eight bandage, with a sling for the arm, produces the desired effect, whilst in other cases where it is difficult to overcome the deformity, the surgeon must rely upon his skill in using and applying a bandage, with a pad secured in the axilla by a strap passing over the opposite shoulder.

Fractures of the scapula do not commonly occur without either severe bruising of the surrounding parts or some other more serious complication, of which fractured rib is by far the most frequent. When they do occur without any serious complication, the treatment consists only of a sling or bandage to steady the arm and take off the weight of the limb, and this is all that can be done if the acromion or coracoid process be broken.

Before speaking of the mode of treating the long bones in detail, it may be well to mention some of the materials which are in use in London at the present time for securing the position of fractures, after the application of splints has been dispensed with, as these means are not uncommonly found available in the first instance, and can be applied in many instances where there is no bruising, and where only one of two bones is broken, as happens particularly in the case of a fracture of the fibula or radius. The principal of these are, the starch or glue bandage, the plaster-of-Paris bandage, and one made stiff with dextrine, gum and chalk, etc. A very useful material for this purpose has long been in use at St. George's Hospital, and can be applied in the first instance in treating fracture of the fibula without bruising, and is almost invariably employed to put up fractures of the thigh or leg as soon as union has taken place and the splints can be laid aside. A piece of ordinary stout mill-board is cut to about the size necessary to embrace the limb, it is then soaked in hot water, which renders it pliant, and is shaped roughly to the limb, the edges being torn carefully so as to form a bevelled margin. A piece of flannel is then placed round the limb, or a simple roller is applied, and then a bandage is neatly and firmly carried from the toes to a distance above the joints between which the fracture is situated, and closely embracing the mill-board. This, on drying, makes a very convenient apparatus, light and strong, and in order to increase its strength and to keep the bandage from becoming unravelled, a thick coating of clarified gum is pasted over the bandage. The starched bandage, which is in general use at University College, is applied in much the same manner, coarse pasteboard soaked in starch being used, and the limb being surrounded by an even layer of cotton-wool before this is applied. This being elastic, avoids the danger of compression which might ensue when this treatment is followed, as it often is, in the case of recent fractures; and the apparatus has the advantage, when thus applied, that it can, if necessary, be split up by a strong pair of pliers, and its width curtailed, while its efficacy for support can be re-established by the application of tapes or a fresh bandage. With one of these forms of permanent apparatus it is almost invariably the custom to treat fractures after union has taken place, and in many instances where the displacement is not great and the extravasation slight, recent fractures are also treated in this way. In the case of the bones of the leg, a junk is sometimes slung in a "Salter's swing" and the limb placed in it for a few days, until all swelling and bruising have disappeared. A solution of silicate of potash is sometimes preferred to either of the above-named materials.

To return, then, to the consideration of the fractures of the various bones and the usual plans for their treatment. In London hospitals the general method adopted in cases of fracture of the shaft of the humerus is to put the arm up in four well-padded wooden splints, tied together by two pieces of bandage which are made to encircle them, one above and one below, and the forearm, being supported by a sling round the neck, gives sufficient extension to ensure a good position of the broken ends. The fingers and forearm may be left unbandaged, unless there is a tendency for these parts to become swollen, and this treatment is usually continued until union has taken place, but the plaster-of-Paris bandage can be applied as soon as all swelling has subsided. This form of treatment can be used in all cases of fracture of the shaft, except those of the condyles or of the lower end of the bone, for which a rectangular wooden splint is almost always resorted to, with or without three additional flat splints to encircle the humerus, the one arm of the right angle being placed along the front of the forearm, and the other along the anterior aspect of the humerus. Any immoveable apparatus is disapproved of in this locality on account of the desirability of making early movement in the elbow-joint, which generally is more or less injured when the accident takes place, and is therefore liable to become stiff if passive motion is not commenced at an early stage.

The old plan of treatment of fracture of the olecranon was to put a long straight splint on the anterior aspect of the arm and thus keep it fully extended, whilst the fragments were brought as nearly as possible into apposition by a figure-of-eight bandage. But when, by the action of the triceps, the upper portion of the ulna was drawn a long way up the arm, this plan was not found to give very good results, which answered, however, sufficiently well when the fibrous covering of the bone held sufficiently together to prevent any great separation of the parts. Accordingly, the plan which has been successfully carried out in the case of the patella has been tried for the ulna, and the parts brought closely together by a silver wire passed through holes drilled obliquely down from the surface of each fragment. Under the antiseptic system this mode of proceeding has been attended with remarkable success in the few cases which have been reported, but it remains to be seen whether it is capable of being more generally followed.

A couple of well-padded, straight, and flat wooden splints are generally all that is required to keep the bones of the forearm in position when fracture takes place in the shaft of one or both, but many plans are in use for correcting the deformity in the injury which goes by the name of "Colles' fracture." Some surgeons use these same splints, and by a turn of the bandage which keeps them in position, passed over the hand, maintain it at an angle downward to the side of the ulna, and obtain satisfactory results. Another very useful apparatus, by which the deformity is more easily corrected, is that invented by Dr. Gordon, of Belfast, who denies that impaction of the broken ends of the radius is of common occurrence, and corrects the deformity "by traction on the hand or pressure on the fragments, placing the hand in the prone position, then applying to the anterior surface of the forearm a splint to which a wooden conical or triangular piece is so attached that the external border of the splint projects beyond it; and on the back of the forearm a straight splint more thickly padded over the wrist than over the forearm," the whole to be fixed by two straps of webbing, and not by bandage. A more convenient and less complicated method in common use is a pistol-shaped splint applied to the back of the hand, with or without a short straight splint to the front of the forearm, and not extending beyond the wrist; the two being kept in position by a bandage.

Passing to the lower limbs, and to the fractures which occur in the femur, the plan of treatment usually followed in London hospitals is by one of the two forms of long splint reaching from the axilla down to the foot, and applied with or without shorter splints surrounding the thigh. When these are applied the foot is fixed by bandages to the lower end of the splint, and to an iron foot-piece which runs out at right angles to it, the form of splint known by the name of the French surgeon Desaulx, and this is secured to the body by a band passing round the waist, and runs up on the outer side of the body to the axilla, having a fork cut in its upper extremity for the purpose of giving a secure *point d'appui* for the perineal band, as it is called, by which traction is made. On this band are threaded three short flat splints, the upper ends of which are cut obliquely so as to fit the line of the groin, and these, with the long splint, surround the whole thigh, and are kept in position by one or more pieces of webbing. The whole having been properly adjusted, traction is made by tightening the perineal band, which, by passing over the upper end of the long splint round the groin and behind the nates, causes extension of the whole limb, and brings the fractured surfaces into close and accurate apposition. The shorter splints are, however, very frequently dispensed with, and then extension is effected by means of a weight applied with strapping to the leg and passing over the end of the bed, where an apparatus is fixed with a rest, over which the cord attaching the weight of seven to nine pounds is passed; and to further the effect of extension the lower end of the bed is slightly raised by blocks, so that the weight of the body may act in a manner to extend from the opposite direction. A patient thus treated is usually kept in bed for from four to seven weeks, and then one of the forms of immovable apparatus

is generally applied, plaster-of-Paris being less frequently used in the case of the thigh on account of the great weight which a splint made with this material necessarily involves. With very young children the best results are often obtained by using a weight to the leg as above described, while, to secure the limb from movements during sleep, and to keep the fragments in good position, a sandbag is placed on either side of the thigh, and another laid across the seat of the fracture; and further to prevent the patient from slipping down, and so nullifying the influence of the weight, a band is passed behind the back, from which two loops pass over the shoulders, and this is tied beneath the bed or secured to its upper end. One of these forms of treatment suffices in almost all fractures of the thighbone, but there are some in which the broken ends cannot be kept in position by any such means, and this happens particularly when the break occurs a short way below the trochanters, and the upper fragment is drawn upward and inward by the action of the psoas. For these cases the most frequent apparatus used is Earle's bedstead, which allows the patient to lie flat on his back, but the foot being secured on the injured side to a footpiece, the knees are bent over the raised portion of the bed, which thus forms a double inclined plane, and traction is kept up by the weight of the body, the knee thus becoming practically a fixed point. Many other ingenious modes of effecting the same results have been invented and are occasionally used, but they are not in general use, and are only required in exceptional cases; such, for instance, are the methods of placing the limb in a wire support, without splints, and making extension by a weight attached to the foot and passing over a pulley, which is placed at some height and distance from the end of the bed, or the splint known by the name of "Thomas," which consists mainly of a couple of parallel iron rods united at both ends, the upper being secured round the pelvis, and the lower to the foot, whilst a bandage passes round the whole apparatus and gives support to the lower part of the limb.

The treatment of fracture of the patella varies in detail at almost every institution, but the main points are to reduce the effusion into the synovial membrane of the knee joint, by which the primary separation of the fragments is mainly produced and maintained, and then to bring the two surfaces as nearly as possible in apposition. The first object is attained by raising the limb to an angle with the trunk on pillows, junks, or other apparatus, and applying evaporating lotions to the joint, and the second, by the use of bandages applied in various fashions, strapping, to which is sometimes attached a weight, which passing over the foot is intended to drag down the upper fragment and to act counter to the retraction of the quadriceps extensor. Some surgeons still use Malgaigne's hooks, but they are objectionable on account of the risk of inducing erysipelas. The operation of wiring together the fragments has already been alluded to, and has now been performed in a considerable number of instances, but the danger, even with the utmost aseptic precautions, is sufficient to deter surgeons from recommending the operation, especially when the accident occurs, as it most frequently does, in persons past the healthiest period of life, and also considering the very useful limb which is obtained by patients who are willing to submit to a prolonged course of treatment by simple means. Where the separation of fragments has taken place after fibrous union between the two ends of bone, the operation has been resorted to in several cases with more or less satisfactory results. Where splints are used for the treatment of fractures of the bones of the leg, those which bear the name of Cline are, perhaps, most frequently had recourse to. They consist of two pieces of light pine wood, roughly hollowed out and shaped to embrace the outer and inner surfaces of the calf, ankle and foot, a round hole being cut for the malleolus in each. These are padded with tow or cotton-wool, and are fixed to the foot by pads and bandages, whilst they are secured round the leg by two pieces of board webbing. Other surgeons prefer to support the back of the limb, and for this purpose use three flat deal splints to which a foot-piece is applied, and these are kept in position by webbing and strapping or bandages. Whatever form of splint is used, the custom is almost invariable of swinging or raising the limb, either by junks or by the use of "Salter's swing," which allows the patient to exercise more movement of the body without disturbing the injured extremity. In some cases where the swelling is not great, the limb is placed in plaster-of-Paris, by laying strips of blanket soaked in the plaster on either side of the leg, and bandaging with muslin into which the dry plaster has been rubbed, cotton-wool being used, or, as some prefer, a flannel bandage, to guard against the risk of subsequent swelling. For Pott's fracture, where ecchymosis forbid its immediate treatment by some immovable apparatus, the practice recommended by the Dublin surgeon is usually adopted, namely, to place a single flat wooden splint upon the inner side, with a thick pad over the inner malleolus, and to secure to this the foot below and the leg above by light bandage.

The same apparatus suffices in the treatment of compound as in simple fractures, the more so as the wound is almost invariably treated on antiseptic principles, more or less strictly carried out in the manner of Professor Lister. Some surgeons, however, still adhere to the use of "Assalinis' fracture-box," a weighty and somewhat cumbrous machine, whilst others prefer MacIntyre's splint, which has the advantage of being more easily cleaned, and is thus less likely to become a medium of conveying or retaining the germs of contagious diseases.

THE PRACTICAL IMPORTANCE OF ATTENTION TO MINUTE PHYSIOLOGICAL PRINCIPLES.

Dr. Andrew Clark, in a recent lecture before the Clinical Society of London, spoke thus of one of its shortcomings:

But of all the defects in the work of the society, the one which I consider to be at once the most important and the most inexplicable is the seemingly studied disregard, in the treatment of a patient's malady, of those minute conditions of his daily life, which practically make and unmake health; so that, special management being almost nothing, and special medication almost every thing, it would seem as if physiological principles were of no account in therapeutics. But a more critical study of disease will soon convince us that this inference is unsound and its application incorrect. Putting aside, for the moment, inherited affections and parasitic maladies of whatsoever sort, I shall assume that chronic disease, a state of parts and not a thing interposed between them, is the eventual outcome of continued violation, conscious or unconscious, of physiological laws as they exist for the race or as they are conditioned by the peculiarities of the individual organism. I shall further assume that those violations are not exceptional and gross, but daily and minute, and that their effects, infinitesimal from day to day, become invisible only after longer periods of time, and so escape recognition except by those who are trained to discern the casual connections of subtle things. And I shall furthermore assume that the organism in virtue of the inherent forces maintaining its solidarity tends to repair existing and to repulse threatened disorders, and that, when placed in favorable and liberated from unfavorable physiological conditions, this tendency issues and ends in successful action.

And now let us take for illustration a case of primitive uncomplicated gastric catarrh. Assuredly it does not come without a cause, and it is not introduced from without, but begotten within. It is, in fact, engendered out of a more or less prolonged and petty violation of the laws of stomach digestion, and it is maintained by conditions which, although apparently too trivial to be worthy of notice, are yet sufficient to hinder the formation of healthy peptones, and to traverse the reparative powers of the organism. What is ordinarily done in such a case? The patient is told in a vague sort of way to have a light and nourishing diet, to take daily exercise, to avoid anxiety and overwork, and to try bismuth and alkalies, with an occasional alterative aperient.

Now, speaking, if I may be permitted to do so, from my own experience, it is certain that in such a case management is of more moment than medicine; and that, without a rigid and even minute obedience to the physiological conditions of healthy digestion, the chances are small of a speedy and permanent recovery from the gastric catarrh.

But the instruction of "a light and nourishing diet" admits of the widest diversity of interpretation; and with the most loyal desire for literal obedience, the patient, according to his age, habits, and status in life, may be unwittingly guilty of doings the most conflicting and injurious. He may eat too often or too seldom; his food may be fresh or preserved, too highly seasoned or too insipid, too concentrated or too bulky. He may take too much liquid or too little, too often or too seldom, too hot or too cold, effervescent or still. And without a conscious, but yet real and great departure from the intention of his instructors, he may frequently refresh himself with cups of tea and coffee, and make glad his heart by incidental glasses of wine or of beer.

Now, there is a right way and a wrong way in the management of every such case; and although they lie so near each other, and are so much alike that the distinction between them is not easy of discernment, it is necessary that the distinction shall be made. For it is upon a correct giving, or not giving, minute attention to the physiological conditions affecting the quantity, quality, and character of the solid and liquid food, the times and circumstances of eating and drinking, the amount of exercise, work, and sleep, and the adequate discharge of the excrementitious functions, that our work will succeed or fail, that our case will turn for evil or for good, and that the patient will either recover his health or drift into permanent valetudinarianism. If time permitted, and the occasion would justify it, I could easily produce from the records of our common experience in every department of medicine illustrations the most various and conclusive of the peril of neglecting and the profit of following minute physiological considerations in the treatment of disease. On this occasion I shall content myself with one.

About eight years ago I was summoned to a consultation in South Kensington, where, in presence of the patient and his family, I met Dr. Andrew Stephen and Dr. Taylor. It appeared that the subject of our consultation, having been ill for many weeks and growing rapidly worse, had been brought from Wales to London for further advice, and that the advice given was opposed to the feelings and convictions of the patient and his friends. The family therefore refused, without the help of another opinion, to carry out the proposed treatment, and accordingly, with the acquiescence of the doctor, I was summoned to examine the patient, and to state my views, without previous consultation with my colleagues, but in their presence.

The patient, a tall, stout man of about sixty, with flushed face, suffused eyes, anxious countenance, and swollen legs, sat leaning forward in an arm-chair, partially undressed, breathing laboriously, and apparently in much distress. He complained of shortness of breath and palpitation, of

confused sensations in his head and occasional dizziness, of general weakness and of indescribable depression.

The patient had a loaded tongue, with fetid breath, and although troubled with nausea was able to take freely of food and drink. The abdomen was distended and the liver distinctly enlarged. There were frequent discharges of fetid gases from the bowels. The feces, discharged twice or thrice daily, were dark, offensive, and unformed. The urine was scanty, pale, faintly acid, of density 1010, and slightly albuminous. The heart was large, flabby, murmurish, frequent, quick, and irregular in time and force. The pulse was small, thready, irregular, and beating over a hundred times in a minute. The legs were edematous, bluish, red, and cold. The cervical veins remained continuously distended. Both lungs were congested at their bases, and there was frequent cough, with frothy and sometimes sanguinolent expectoration. Nothing worthy of note was discovered in the nervous system.

Inquiring now as to the treatment which was being pursued, I was told that, in the opinion of all who knew him and of all the doctors, except the last who had been consulted about him, that the patient was a man of naturally delicate constitution, that he needed constant keeping up, and that his chances of life were in direct proportion to the amount of support that he could take. Accordingly he was taking food and wine every second hour, had iron, quinine, and strychnia three times daily, and, being increasingly thirsty, he drank milk and soda-water without much regard to frequency and amount. Questioned as to my opinion of the patient's malady, and urged by my colleagues to say exactly what I thought, I replied that he was a man with deteriorated but not seriously diseased tissues and organs, and that he was in peril of death, not so much from his malady as from the means used for its cure; that he was being poisoned by food and wine, that he was in the condition of a fire having more coals put upon it than it could burn, and that his chimneys being choked, he was in near danger of being suffocated with his own smoke.

My colleagues agreeing with this view of the case, and the patient, after much discussion and explanation, assenting, he was placed upon a precise and severe regimen. He was ordered to have four simple nursery sort of meals in the course of the day; to have an ounce of brandy, diluted with eight parts of water, at dinner and supper; to be restricted to two pints of liquid in the course of the twenty-four hours; to take nothing of any sort between meals; and, as soon as he was able, to move about the rooms in which he dwelt. In the way of drugs he was directed to take, for a week or longer, a grain of calomel at night, followed by a saline aperient on waking in the morning; and to have, twice or thrice daily, two hours after food, infusion of gentian with bicarbonate of potash, iodide of potassium, tincture of digitalis, and aromatic spirits of ammonia.

For the first three days he was no better for this treatment. It tried him severely through the restriction of his liquids, and, declaring himself worse for it, he threatened to discontinue it and to return to his former ways; but, on the fifth day, he began to improve, and then, his confidence being gained, there was no further difficulty in continuing the treatment, which, when digestion improved, was added to by the administration of reduced iron with meals.

At the end of three months the patient declared that he was well, and all that could be said against him was that he had a weakish heart, that he was breathless upon exertion, that he had rather inadequate kidneys, and that, to maintain his sense of well-being, he was compelled to live by rule. This rule was a midday dinner, with an ounce of brandy in half a pint of water; a moderate breakfast and tea, with eggs, or poultry, or fish; extreme moderation in the use of fluids; tepid sponging, warm clothing, gentle exercise, and early hours.

Within a year I heard of the patient being in fair health, and managing his iron works in Wales. What I have since heard of him from time to time is instructive. Occasionally losing his faith, or lacking strength to follow his rules, he returns to the freedom for which he longs, frequents society, dines late, rejoices again in his wine, and has his heart's desire. For a time all goes merrily and well, and he breaks sarcastic jokes over the heads of physicians. But, sooner or later, the urine diminishes in density and becomes albuminous; the heart loses its strength and regularity; the breathing is oppressed; the nights are sleepless; till at last, after much suffering, his obstinacy is conquered, and re-convinced and humbled and penitent he returns to his obedience, and again recovers his health.

Such cases are common enough; and my experience forbids me to doubt that, in fevers and inflammations, in hemorrhages and acute diseases of every sort, the issue of particular cases turns oftener than we are perhaps ready to admit upon an adequate understanding of the physiological principles applicable to the removal of the conditions imperiling life, and upon the resolution and patience, the minuteness and fidelity, with which they are enforced.

And such considerations are true and important, not only in diseases jeopardizing life, but also in common disorders which, although devoid of serious peril, invade our comfort, hinder our work, and dull our joys in life. I do not forget that, through hereditary influences and unsuitable but inevitable environments, many persons are doomed to be constantly ailing without being ever really ill; that their normal state is one of suffering; that no physiological readjustments and no specific medication can give to them the pleasant sense of

health; and that attempts to effect what is impossible issue only in greater sufferings or in disaster; but, making full allowance for such cases, there remain countless numbers who are willing and eager to make any and every sacrifice necessary to recovery, and who are left to continue in suffering because the physiological principles and compensations applicable to their relief are derided, disregarded, or denied.

SOME FACTS ABOUT URINE.

By Lechmere Anderson.

A knowledge of urine and its constituents—normal and abnormal—has, of late years, become so important a branch of the study of clinical medicine that a few points concerning it may be of help to the student.

Its Characters.—Healthy urine is a clear, amber-coloured fluid, transparent, with a peculiar odour, and a saltish taste, usually containing small clouds of mucus deposit.

Its specific gravity, obtained by the urinometer, is, in health, about 1020; water being taken as 1000. As a rule, the sp. gr. is in inverse proportion to the quantity of urine passed, but occasionally, we get a high sp.gr. with an excessive amount of urine, as in diabetes mellitus. In disease the sp. gr. may vary from 1,000 to 1,050; when we have it above 1,040, we may suspect diabetes mellitus.

Its principal constituents are, urea (400–500 grs. daily), uric acid, hippuric acid, kreatin, kreatinin, besides phosphates, sulphates, chlorides, in conjunction with lime, potash, soda, &c.

To ascertain the amount of solids contained in urine is very readily done by Christison's formula, the rule for which is, "Multiply the last two figures of the sp. gr. by 2.33, and you get the amount of solids per thousand, thus, taking the sp. gr. to be 1,026

$$\frac{26 \times 2.33}{}$$

60.58 parts per 1,000."

The quantity may vary from normal (50 ounces), to more than 200 ounces daily in disease, or it may be almost suppressed, or completely so, as in collapse and renal congestion.

Its reaction may vary; even in health we may have it alkaline. where alkalies have been taken in excess, and we have it alkaline in disease, as in certain forms of acid dyspepsia, &c.

Its colour may be altered owing to the presence of
(*a*) Blood. (*b*) Bile. (*c*) Sugar.

Deposits in urine may be—

(*a*) Mucus, which may contain epithelium, either from bladder, kidney or vagina, spermatozoa, &c.

(*b*) Urates, either of potash, soda, lime, or ammonium; they are reddish or purplish in colour, and disappear when the urine is heated.

(*c*) Uric acid may be seen as little grains resembling those of Cayenne pepper.

(*d*) Oxalate of lime are seen as bright refractile particles floating in the urine, they therefore can hardly be called a deposit.

(*e*) Phosphates, which may either be amorphous phosphates, phosphate of lime, or ammonia phosphate of magnesium; the deposit is of a greyish-white colour, and the urine is alkaline.

(*f*) Pus, as a yellowish-white deposit.

Tests:—

(*a*) For mucus, add liquor potassæ, and it becomes ropy on boiling.

(*b*) For urates—
(1) The colour is characteristic.
(2) They disappear on boiling.
(3) And when water is added to excess, or
(4) Upon the addition of an alkali
(5) By the microscope.

(*c*) For uric acid, by the microscope.

(*d*) For oxalate of lime, ditto.

(*e*) For phosphates—they do not disappear upon boiling; but a drop of nitric acid at once clears up the urine.

(*f*) For chlorides—add nitrate of silver and a white precipitate is formed, insoluble in nitric acid, but soluble in ammonia.

Abnormal constituents:—

(*a*) Albumen. (*d*) Bile.
(*b*) Sugar. (*e*) Pus.
(*c*) Blood. (*f*) Casts.

Tests:—

(*a*) For albumen—
(1) See that urine is acid, if not add a few drops of acetic acid, heat, and the albumen is precipitated.
(2) Cold nitric acid test—add urine to nitric acid in a test tube, by gently pouring it down the side, and a line of precipitated albumen is formed between the two fluids.
(3) On addition of a drop of urine to some picric acid you get a turbidity produced.
(4) Add a small quantity of metaphosphoric acid to urine, and you have a turbidity produced even when the albumen is present in very minute quantities.

(*b*) For Sugar—
(1) Moore's Test.—Add to the urine half its volume of caustic potash solution and boil, when, if sugar be present, the colour of the urine will change to a dark sherry, add
(2) To this a few drops of Fehling's solution, sufficient to make the mixture blue, boil the upper stratum, and it will pass from blue to yellow and brick red.

N.B.—Fehling's solution contains:—
Cupric sulphate... 34.63 gram.
Sodium tartrate... 173
Caustic soda..... 500
Aqua..... 1 litre

As Fehling's solution is apt to decompose if kept long, it should be tested first by boiling alone.

(3) Trommer's Test.—Add a dilute solution of sulphate of copper to the urine, until it produces a pale blue tint, then add caustic potash, when a flaky precipitate appears, which disappears on adding more caustic potash.

(4) Fermentation Test.—Add some yeast to the urine, and allow it to stand for some time in a warm place, when fermentation occurs if sugar be present, and carbonic acid gas is given off.

(*c*) For blood—

(1) By the microscope.

(2) Dip a piece of blotting paper in the urine and dry it, add a drop of the tincture of guaiacum to it, and some ethereal solution of peroxide of hydrogen, when a beautiful blue colour is almost immediately produced if blood be present.

N.B.—The peroxide of hydrogen may be obtained under the name of ozonised ether.

(*d*) For bile—

(1) For bile pigment, add a drop or two of nitric acid to a small quantity of urine on a white porcelain plate, when a play of colours may be noticed, passing through green, blue, violet, red, into a dirty yellow.

(2) For bile acids.—To some urine, in a test tube, add a small quantity of cane sugar or syrup, afterwards add some strong sulphuric acid slowly down the side of the tube, so that the two fluids shall not mix, a deep purple colour will be produced at their junction.

(*e*) For pus—

(1) By the microscope.

(2) If present in any quantity, it forms a yellowish white deposit which becomes ropy on addition of nitric acid.

—*London Student's Journal and Hospital Gazette.*

INFUSION OF CHAMOMILE AS A REMEDY FOR INFANTILE DIARRHŒA.

Christopher Eliot, M.D., writes, in The *Practitioner* of December, 1882, that he now seldom employs any other remedy than infusion of chamomile (*Anthemis nobilis*) in infantile diarrhœa. It is especially useful for the diarrhœa occurring during dentition, when the stools are many in number, green or slimy, and streaked with blood. Pain or cramp especially indicate its use, and a few doses will quickly calm a fretful child. ℥ ss. to ℥ j. of the infusion may be given to a child under one year of age, or double that quantity to a child over that age, and it may be repeated thrice or oftener daily, according to the severity of the case.—*Med. Reporter.*

THETREATMENT OF SPERMATORRHEA.

BY DR. H. COUPLAND TAYLOR.

Obstinate cases of spermatorrhea and frequent nocturnal emissions constantly come under the care of the practitioner. Too frequently the medical man consulted simply tells the patient that if he breaks off the pernicious habit of masturbation, which has probably originated his malady, he will soon quickly recover. But, in fact, in most cases, the habit has already been abandoned before he comes to seek advice, and these cases do not get well for months or even years afterward, unless proper measures be taken. Knowing that he has eft off this bad habit, and that he nevertheless does not improve, his complaint being made light of by the regular practitioner, and being greatly depressed in mind, he seeks the advice of the quack, who is always ready to benefit by these cases. I will give an outline of the treatment I have followed, and which I have found most successful in several such cases. The treatment should be : (1.) Moral, (2) Hygienic, (3) Medicinal :

1. *Moral*—(*a*) The pernicious of habit of masturbation, which has probably been the origin of the complaint, must at once be discontinued, or no good can result from any treatment. (*b*) The thoughts should be directed from himself by his having regular work and exercise. (*c*) The anxiety of mind which ensues should be allayed as much as possible, and a happy state of mind instituted.

2. *Hygienic*—(*a*) The patient should have regular, but not excessive, mental employment, and bodily exercise in the form of walking, riding or outdoor sports and games. (*b*) Cold sponging of the genitals night and morning for some minutes, or as long as can comfortably be borne, is a most important agent in giving tone to the relaxed organs. (*c*) The patient should have a hard mattress, and as little and as light clothing as possible at night. Care should be taken not to lie on the back, which may be prevented by wearing a knotted towel over the spine, or by some other device. (*d*) No quantity of liquor should be taken before retiring to rest, and the bladder should be emptied the last thing.

3. *Medicinal*—A mixture containing tincture of perchloride of iron and tincture of nux vomica should be given twice or three times a day; also a pill containing a fourth or a third of a grain of extract of belladonna with three grains of camphor should be given at first every night, and then every other night, immediately before going to bed. If these lines of treatment be adhered to, the patient, whether suffering from real spermatorrhea or simply from frequently returning nocturnal emissions, will steadily improve, and the emissions will occur less and less frequently, till, in the course of a few weeks, or possibly months—for a malady of long-standing (as this usually is) is never cured immediately—they will cease altogether, or only occur at such intervals as may be deemed normal, and in which there is no harm whatever.—*British Med. Jour.*

ANÆSTHETIC MIXTURES FOR SMALL OPERATIONS.

It is often desirable to apply locally some anæsthetic material to deaden the sensibility sufficiently for small operations. There are various expedients proposed for this purpose. We do not now refer to the use of ether spray, but to various liquids which may be applied directly, and the sense of pain so far obtunded as to permit incisions without experiencing any other sensation than a mere touch. The mixture of chloral and camphor is often useful. When equal parts of chloral and camphor are triturated together, a clear, somewhat viscid, transparent solution results. This solution has considerable resolvent power, and will take up a comparatively large proportion of morphia. Chloroform may also be added to it without precipitation of any proportion of the dissolved constituents, thus :

℞ Chloral,
Camphor, aa ʒ ij.
Morphiæ sulph., ʒ ss.
Chloroform, ʒ j. M.

This may be applied with a camel's hair brush over the area to be incised, allowed to dry, and reapplied as freely as may be necessary to render the part insensible to pain.

Amongst the anæsthetic mixtures for surgical purposes proposed by Prof. Redier, are solutions of camphor in ether and in chloroform. One drachm of camphor may be dissolved in two drachms of ether, or the same quantity of camphor in two drachms of chloroform. A useful anæsthetic mixture is prepared by the addition of crystallized acetic acid to chloroform, in the proportion of one part of the acid to twenty parts chloroform. These anæsthetic solutions are applied by the brush freely over the part of the seat of pain, or to be incised. In some instances it may be better to moisten a cloth or some cotton and allow it to remain for some time in contact with the part.

Pure carbolic acid has an anæsthetic effect when applied to the skin. This fact has been utilized to lessen the pain of incisions in the skin in small operative procedures.—*Phil. Med. News.*

THE ACTION OF CHLORAL, OPIUM, AND BROMIDE OF POTASSIUM.

In an article in the *British Medical Journal*, embracing a recital of experimental investigations, Dr. Sidney Ringer and Dr. Harrington Sainsbury make the following important observations on certain well-known drugs, after discussing the physiological effects of the agents mentioned in the title of their paper : "Clinically, the dangers of bromide of potassium and of chloral have been recognized ; and thus in our text-books we find the statements that the presence of grave adynamic symptoms contraindicate chloral and bromide of potassium. Opium, on the other hand, in such adyna micstates, frequently appears to lend actual support. The results of definite experiment we find to accord with the results of clinical experience ; and the value of the former lies in that they confirm, and by their definiteness must tend to enforce, the teachings of the latter. The choice of a drug is, however, no simple matter ; an advantage here may be outbalanced by a disadvantage there ; and practical men may object that they would gladly give opium, but that the disordered stomach, blunted appetite, inactive liver, and torpid intestines more than outweigh the advantages of opium administration. This clearly is a matter for consideration in the individual case under treatment ; and the decision will have to be according as one or other element—asthenia, or derangement of the digestive, etc., powers—is most to be feared. These objections to opium on the one hand, and chloral and bromide of potassium on the other hand, raise the question as to whether, in very many cases, a drug, at present very extensively used, especially in America—viz., bromide of sodium—might not with advantage be substituted in their place. The salts of sodium generally contrast very markedly with those of potassium ; for the chlorides, bromides, and iodides of these two metals, the lowest figure would represent the potassium as ten times as active as the sodium. These precise numbers refer to action on the ventricle of the frog's heart (see *Medico-Chirurgical Transactions*, vol. lxv, concerning the action of the salts of potash, soda, and ammonia on the frog's heart), but on all hands the evidence is forthcoming that, while salts of potassium are very poisonous, those of sodium are very slightly so. One of the marked points of contrast between the two sets of salts is to be found in respect of inhibition ; potassium salts inhibit the frog's ventricle strongly, sodium salts scarcely at all. Here, however, we are considering drugs as to their cardiac effect ; and, in respect of this, sodium bromide would rank far ahead of bromide of potassium, chloral, or opium, as to innocuousness. The objections holding for opium would not apply here, for sodium salts are generally very little disturbing to the tissues. With these advantages the general verdict of clinical experience is to the efficacy of bromide of potassium ; and, should this position be maintained, it is clear that bromide of sodium will be in very many cases the sedative above all others to be selected."—*N. Y. Medical Journal.*

TREATMENT OF AGGRAVATED HYSTERIA AND CERTAIN ALLIED FORMS OF NEUROSTHENIC DISEASE.

Dr. W. S. Playfair concludes an interesting and quite exhaustive article on this subject as follows :

The principal elements in the systematic treatment of these cases are—

1. The removal of the patient from unhealthy home influences, and placing her at absolute rest.

2. The production of muscular waste and the consequent possibility of assimilating food by what have been called "mechanical tonics;" viz.: prolonged movement and massage of the muscles by a trained shampooer, and muscular contractions produced by electricity.

3. Supplying the waste so produced by regular and excessive feeding, so that the whole system, and the nervous system in particular, shall be nourished in spite of the patient.

On each of these I shall offer one or two brief observations:

1. The removal of the patient from her home surroundings, and her complete isolation in lodgings, with only a nurse in attendance, is a matter of paramount importance. This is a point on which I am most anxious to lay stress, since it is the great crux to the patient and her friends; and constant appeals are made to modify this, which I look upon as an absolute *sine qua non*. I attribute much of the success which I have been fortunate enough to obtain in my cases to a rigid adherence to this rule. In almost every instance of failure in the hands of others, of which I have heard, some modification in this rule has been agreed to, in deference to the wishes of the friends; as, for example, treating the case in one room by herself in her own house, or in admitting the occasional visits of some relatives or friends. While, however, the patient is to be rigidly secluded, it is incumbent to secure the attendance of a judicious nurse, with sufficient intelligence and education to form an agreeable companion. To shut up a refined and intellectual woman for six weeks with a coarse-minded stupid nurse, can only lead to failure. I have had more difficulty in obtaining suitable nurses, sufficiently firm to ensure the directions being carried out, and yet not over-harsh and unsympathetic, than in any other part of the treatment. Whenever my case is not doing well, I instantly change the nurse—often with the happiest results. In addition to the isolation, the patient is put at once to bed, to secure absolute rest. In many cases she is already bed-ridden; in others there has been a weary protracted effort, and the complete repose is in itself a great gain and relief.

2. Under the second head comes systematic muscular movement, having for its object the production of tissue waste. This is administered by a trained rubber, and here again is a great practical difficulty. The so-called professional rubbers are, in my experience, worse than useless, and I have had to teach *de nova* a sufficient number of strong, muscular young women; and the aptitude for the work I find to be very far from common, since a large proportion of those I have tried have turned out quite unsuited for it. I cannot attempt any description of this process. I need only say that it consists in systematic and thorough kneading and movements of the whole muscular system for about three hours daily, the result of which at first is to produce great fatigue, and subsequently a pleasant sense of lassitude. Subsidiary to this is the use of the faradic current for about ten to twenty minutes, twice daily, by which all the muscles are thrown into strong contraction, and the cutaneous circulation is rendered excessively active. The two combined produce a large amount of muscular waste, which is supplied by excessive feeding; and in consequence of the increased assimilation and improved nutrition, we have the enormous gain in weight and size which one sees in these cases, it being quite a common thing for a patient to put on from one to two stones in weight in the course of five to six weeks. The feeding, at regular intervals, constitutes a large part of the nurse's work. At first from three to five ounces of milk are given every few hours; and for the first few days the patient is kept on an exclusive milk diet. By this means dyspeptic symptoms are relieved, and the patient is prepared for the assimilation of other food. This is added by degrees, *pari passu* with the production of muscular waste by massage, which is commenced on the third or fourth day. By about the tenth day the patient is shampooed for an hour and a half, twice daily, and by this time is always able to take an amount of food that would appear almost preposterous, did not one find by experience how perfectly it is assimilated, and how rapidly flesh is put on. It is the usual thing for patients to take, when full diet is reached, in addition to two quarts of milk daily, three full meals, viz.: breakfast, consisting of a plate of porridge and cream, fish or bacon, toast and tea, coffee and cocoa; a luncheon, at 1 P. M., of fish, cutlets or joints, and a sweet, such as stewed fruit and cream, or a milky pudding; dinner at 7 P. M., consisting of soup, fish, joints, and sweets; and, in addition, a cup of raw meat soup at 7 A. M. and 11 P. M. It is really very rare to find the slightest inconvenience result from this apparently enormous dietary. Should there be an occasional attack of dyspepsia, it is at once relieved by keeping the patient for four and twenty hours on milk alone.

Such is a brief outline of the method to which I am here to direct your attention. As to the results, I have already published several remarkable illustrative cases, so that it is perhaps not necessary to do much more in this direction. I may say, on looking back at my cases, that the only ones with which I have had any reason to be disappointed are those in which the primary selection has been bad; and in the few in which the results were not thoroughly satisfactory, I had doubts as to their suitability for the treatment, which I expressed beforehand. These include one case of chronic ovarian disease, and one of bad anteflexion with fibroid enlargement of the uterus, in both of which the local disease prevented any really beneficial results. In a third I had to stop the treatment in a week, in consequence of cardiac mischief; two others were cases of positive mental disease; and in one case there was true epilepsy. I have no doubt that any positive co-existent organic disease

of this kind should be considered a contraindication. In my other cases the results have been all that could be wished, and in many of them the patients have been restored to perfect health after having been helpless bed-ridden invalids for years; in one case twenty-three without ever putting a foot to the ground, in others sixteen, nine, six, and so on. In two instances my patients were in such a state that it was found absolutely impossible to move them except when anesthetized, and they were brought to London by the medical men long distances under chloroform, in each case leaving in six weeks perfectly cured.

THE ORIGIN OF CREPITANT AND SUB-CREPITANT RALES.

By D. M. Cammann, M.D.,

Late attending physician to the New York dispensary, class of diseases of the heart and lungs.

It may, I think, be proved, by logical deductions from physiological facts, that crepitant and subcrepitant rales are not produced in the smaller bronchi and air-vesicles; and that they, as well as coarse or "mucous" rales, have their origin within the pleura, has been made evident by the records of many post-mortem examinations.

Two views are held by authors who assert that the crepitant rale has its origin within the air-cells. One is that the rale is produced by the agitation of fluid within the air-cells; the other, that as the air-vesicles are dilated in inspiration their walls are suddenly separated from their fluid contents to permit the passage of the current of air, and that these rales may sometimes arise from the sudden separation of the cohering walls of the alveoli quite independently of the existence of any trace of exudation.*

The subcrepitant rale is supposed to have its origin in the smaller bronchi, and to be caused by the bursting of bubbles of air.

If these views are true, the respiration must have considerable force in the air-vesicles, and smaller bronchi, or at least there must be a current of air passing in and out with each respiration. But physiology teaches that this does not occur. The change that takes place in the air in the air-cells and smaller bronchi is not by currents of foul air passing out in expiration and currents of fresh air passing in with inspiration, but the change is governed by the well-known law of the diffusion of gases. "This diffusion is constantly going on, so that the air in the pulmonary vesicles, where the interchange of gases with the blood takes place, maintains a pretty uniform composition."*

"By diffusion," says Foster,† "the new or tidal air gives up its oxygen to and takes carbonic acid from the old or stationary air. In this way, by the ebb and flow of the tidal air, and by diffusion between it and the stationary air, the air in the lungs is being constantly renewed." "Now, it is obvious if no provision existed for mingling the air inspired with the air already occupying the lungs, the former would penetrate no farther than the larger air passages. The change [in the air in the lungs] must be attributed to the 'mutual diffusion' of gases, these tending to interpenetrate one another, when of different densities or of different temperatures."‡

That such is the case is evident from the fact that only about one-tenth of the air in the lungs is changed in each respiration. When one lung is crippled by disease the other lung does extra work, as is evidenced by harsh respiratory murmur over the unaffected side, and the diseased lung receives less air than usual at each respiration. And yet it is over such a lung, receiving a small amount of air and in which there can not be currents in the smaller bronchi and air-vesicles, that crepitant and subcrepitant rales are often heard. That rales may arise from the sudden separation of the cohering walls of the air-cells is contrary to the teachings of physiology. The air-cells do not collapse in expiration; nine-tenths of the air in the lungs at the end of inspiration remains at the end of expiration. That rales may arise in air-cells partially filled with exudation by the separation of their adhering sides seems more probable. But it must be remembered that little air enters the parts of the lung where the exudation has taken place; there can be little or no current; the lung is crippled, and expansion and contraction take place to a very limited extent. Has any satisfactory proof ever been adduced to show that crepitant rales are naturally produced under this condition? I think not. On the other hand, that crepitant and subcrepitant rales are produced within the pleura has strong evidence in its support.

Cases are on record § in which rales were heard a short time before death, and, on post-mortem examination, pleuritic exudation was found in the same situation, while the lung beneath in some cases was not diseased; in others there was consolidation, so that no air could have entered the lung in the neighborhood where the rales were heard. To test the correctness of these views, advantage was taken of the large number of cases, of pleuro-pneumonia which destroyed so many cattle a few years ago. "In 1879 a commission was appointed by the United States Government having for its object the stamping out of contagious pleuro-pneumonia among cattle. In August of that year Dr. Leaming was invited to make examinations of some of these cattle, and his diagnoses were to be tested by post-mortem examinations

* "Physical Diagnosis." Guttmann.

* Flint, "Physiology," vol. i. p. 407.

† Foster, "Physiology." London, 1877, p. 219.

‡ Carpenter, "Physiology." Philadelphia, 1853.

§ "Physical Signs of Interpleura Pathological Processes." Dr. M. R. Leaming, "Med. Record," May 25, 1878

performed immediately.* In every case where rales had been heard, pleuritic exudations was found, and where pleuritic exudation was found there had been rales. In six of these cases one lung was completely consolidated; therefore, no air could enter and no rales be produced in them."

Those who are accustomed to make post-mortem examinations know how frequently extensive pleuritic adhesions are disclosed, and cases are not infrequent in which there is little disease of the lung beneath.† In these cases an abundance of rales of different sizes are often heard, but they are usually diagnosticated as intrapulmonary, and, therefore, the result of the autopsy is a surprise to those who make it.

I can find nothing in the details of carefully recorded cases to disprove these views. The cases recorded by Laennec ‡ and by Louis § show that crepitant and subcrepitant rales were only heard over the site of pleuritic adhesions.

If the views expressed in this paper be true, it follows that some sweeping changes will be necessary in our present interpretation of physical signs. Therefore, the facts here advanced should be carefully weighed before being accepted. Facts, however, as opposed to theory, will always be accepted in the end, and in this paper I have endeavored to show not only that fine rales can not be produced within the lungs, but that they are in fact produced within the pleura.—*New York Med. Journal.*

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A SEDATIVE EMMENAGOGUE.

For a day or two antecedent to the actual commencement of the catamenial flux, women not infrequently suffer acute pain in the pelvic region, doubtless due to hyperæmia and hypetæsthesia of the reproductive belongings. To obviate this I have found no treatment give such satisfactory results as the following:

℞ Codeiæ sulphatis,		gr. j.
Chloral hydratis,		
Ammonii bromidi,	aa	grs. xx.
Aquæ camphoræ,		℥ j. M.

Sig.—For one dose. Take at bedtime.

A repetition of the dose at that period is rarely necessary. In some cases a warm sitz-bath of fifteen minutes duration, before retiring, is a valuable adjuvant.—*Virginia Medical Monthly.*

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* J. R. Leaming, M.D. Art. "Endemic Pl ℥ro-Pneumonia." "Med. Gazette," February 7, 1880.

† Dalafield, "Pathological Anatomy." Case, p. 28.

‡ Laennec on "The Chest." § Louis on "Phthisis."

BISMUTH IN DYSPEPSIA OF CHILDREN.

E. W. Dunbar, M.D. (Zurich), M.K.Q.P.I., contributes the following to the *Practitioner:*

Loss of appetite in children with pain after eating, nausea, and depression, if accompanied by a tongue either clean or slightly coated, but showing redness and enlargement of the papillæ fungiformes, is quickly relieved by administration of bismuth, either in the form of the subnitrate or of the solution of the oxide in ammonia and citric acid as discovered and prepared by Mr. Schacht. The dyspepsia, which is characterised by the described appearance of the tongue, is produced by indigestible food. If the tongue is coated the dyspepsia is recent, and it is chronic and of some duration if the tongue is clean; loss of appetite and consequent diminution in the amount of food taken having given opportunity for the tongue to clean.

The digestion of children being easily disturbed, this form of dyspepsia may very frequently be observed among them. It is often necessary to persist in the use of bismuth for several weeks before the papillæ fungiformes resume their normal appearance and a lasting cure is effected, although improvement shows itself quickly in the appetite and returning liveliness and cheerfulness of the little patient. The action of bowels is as a rule markedly improved and more regular, especially if the liquor bismuthi is used; exceptionally the bowels are rendered more constipated, and it is necessary to give a mild aperient occasionally.

While testing the accuracy of the described indication for the use of bismuth I prescribe it, owing to the state of the tongue, in the case of a child who had an obdurate cough that had resisted all the usual remedies for subduing irritation of the larynx. The cough ceased with the improvement which quickly succeeded the dyspeptic symptoms. The dulness and languor produced by this form of dyspepsia in children may easily be mistaken, especially if the tongue is clean, for weakness and a condition requiring tonic treatment. The marked distaste for food and the characteristic tongue point to the true nature of the ailment.

The dose of liquid bismuth varies from two minims under one year, to three, five, ten, fifteen, and twenty minims up to twelve years of age; the dose to be repeated twice to four times a day according to the severity of the symptoms. The remedy appears to be most effectual when taken after meals. The subnitrate may be given in doses of one-half grain up to two, three and five grains.

Bismuth is quite ineffectual in the dyspepsia of children where the tongue is smooth, clean, and shows no enlargement or redness of the papillæ fungiformes.—*The Cincinnati Lancet and Clinic.*

THE SUBCUTANEOUS INJECTION OF ETHER.

It should be more generally known that ether injected subcutaneously has a powerful stimulant effect, and is remarkably efficacious in cases of extreme depression of the powers of life. It has long been used to a limited extent in such cases, but increasing experience has enlarged the domain of its application. In adynamic pneumonia, in fevers when failure of the vital powers is threatened, in the puerperal state, in cases of thrombosis of important vessels, the injection of ether has been lately used with singular benefit. Besides, as a stimulant in conditions of depression, it has important applications as a hypnotic and local anodyne. In cerebral excitement and wakefulness, accompanied by depression of the arterial circulation, it is most useful. In the ore chronic cases of superficial neuralgia, as sciatica, lumbago, intercostal pain, zoster, etc., injected in the neighborhood of the affected nerves often gives surprising relief.

There are contra-indications to its use. It is not proper in the cases of cardiac depression due to chloroform or ether narcosis, and yet it has, in the confusion incident to such an event, been freely injected on the cessation of the cardiac or respiratory movements. Under similar circumstances, alcohol has also been freely injected subcutaneously, but this practice is equally improper —and both for the obvious reasons that these are synergistic agents. Ether, subcutaneously, is also not a suitable remedy when there is arterial excitement with power.

The technical details are simple. Ether must be injected with a glass or metallic syringe. Rubber and celluloid are damaged by it. As ether dissolves the oil with which the piston is lubricated, the syringe should always be put in order after ether had been injected. It is a useful precaution, also, to see that no particles of dirt or of leather are taken up with fat. Vaseline appears to be the safest lubricant under these circumstances. From ten to sixty minims is the dose—fifteen minims being the quantity most frequently injected. Some smarting attends the operation, but if the operator is careful in withdrawing the needle to press on the orifice tightly to prevent the ether escaping, much smarting will be thus obviated. A puffy swelling is caused by the vaporization of the ether, but this presently subsides, and only rarely is an indurated knot formed. An anesthetic and analgesic area of limited extent surrounds the puncture.

The ether used should be of good quality—as good, indeed, as that now employed for inhalation. The number of times injected will depend on the character of the case, but there appears to be no reason why it may not be injected frequently. Three or four times a day has been the rate in cases of adynamic pneumonia. When sudden, extreme depression of the heart is to be overcome, ten or twenty minims can be injected every five minutes, until some result is reached.

The systemic effect is that of a stimulent; the action of the heart is increased, the surface grows warm, and the nerve centers and the organs of the body in general functionate more quickly and powerfully. The curative results of the subcutaneous use of ether are not only different in degree, but in kind, from the stomachal administration of the same agent. This fact must be recognized to obtain a correct notion of the utility of this practice.—*Phil. Med. News.*

THE CANADA MEDICAL RECORD,

A Monthly Journal of Medicine and Surgery.

EDITORS:

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SUBSCRIPTION TWO DOLLARS PER ANNUM.

All communications and Exchanges must be addressed to the Editors, Drawer 356, Post Office, Montreal.

MONTREAL, AUGUST, 1883.

LAVAL AND VICTORIA COLLEGES.

In common with the majority of the profession in Canada, and with many in the United States, we have watched with much interest the struggle which, for several years, has been going on between these two Medical Schools. It is not in our power to give a full résumé of the entire dispute, for it would occupy many columns of the *Record*. A brief outline of it, however, may at this time, be interesting, and assist those who have not carefully followed the controversy, in understanding the position which matters occupy at this moment. There never has been any cordiality of feeling existing between the Catholic dioceses of Montreal and Quebec. The former always looked forward to the time when its wealth would be used to found a new Catholic University, while the latter felt that they already had what must remain *the* Catholic University of the Province of Quebec. In this latter assumption they apparently had the countenance of His Holiness the Pope, who always discouraged the establishment of a new University. In 1877 Laval made its first attempt to obtain a foothold in Montreal. A Law Faculty was established, and it was well known that a Medical Faculty was to follow. The constitution of this Faculty was a source of much coquetting, in which the late Bishop Conroy played a not unimportant

part. It was finally announced that the Faculty of Medicine of Victoria College, formerly known as the School of Medicine and Surgery, as a body, or almost so, had become the Medical Faculty of Laval University in Montreal. If we mistake not they took part in a celebration at Quebec, in their capacity of Professors of Laval. Things were apparently running smoothly when it was announced that they, or the majority of them, had seceded, and not having severed, their connection with Victoria, would continue their school as before. This turned out to be correct, and the reason assigned was, that in their new position they found that their autonomy was lost. Naturally, gentlemen who had conducted with success the largest French Medical School in Canada, felt that they could not become cyphers in the future management of the Faculty which they had entered. They therefore determined to exist as before, a separate independent organization. Each Faculty filled up its ranks, and from that moment the struggle began. Victoria having an agreement for medical control with the nuns of the Hotel Dieu hospital, closed its doors to the members who remained on the Laval staff, and would not allow the entrance of her students. The Laval men, backed by the Seminary of St. Sulpice, opened a new hospital, now known as the Notre Dame, which from its inception has been a credit to its promoters and supporters, and at the same time began their first course of lectures. Victoria tried to close the Laval branch here, as being illegal, and Laval appealed to the Provincial Legislature to set aside any doubt there might be in the matter, and by special act empower the opening of a branch in Montreal. The struggle in the Legislature was a bitter one, but Laval was victorious. In an appeal made by Victoria to the Governor in Council, to set aside the Quebec Act, they met with failure. Then followed suits in court, which were never pushed. Now began really the religious side of the question, at all events so far as the general public were concerned. Both sides sent deputations to Rome, but almost invariably failure came upon the head of Victoria. Still the "school" seemed undismayed, and no sooner were they defeated upon one point, than another was forthcoming upon which the war raged more fiercely than ever. But all things must have an end, and when this summer the apparently final appeal was made to a committee of Bishops in the Province, it was felt by a large number that whatever interpretation these gentleman gave to the last *mandamus* from Rome, must be accepted by the contending factions. Through this committee, Laval, with a view of something like a compromise, offered the Faculty of Victoria, if it would quietly cease to exist, three active professorships, and three Emeritus professorships. But the Victoria Faculty, with an adherence to principle which has been conspicuous in them throughout the contest, determined to succeed or fail together. In this we believe they acted wisely, for at the eleventh hour to have accepted the terms proposed would have destroyed that *eclat* which cohesion had so far given them, and which the Medical historian of this Province will record to their unbounded credit. The decision of the Bishops came at last, and all who read it, felt that, at length, there seemed no possible loophole through which Victoria could continue the fight. Students were, under pain of excommunication, ordered to attend Laval, while the same penalties were uttered against the professors of Victoria College unless they consented to close, and against any student who attended a Faculty of Medicine connected with a Protestant University. For one moment let us turn aside from the relation of facts to give utterance to the regret which we, in common with, thousands, feel, that in this nineteenth century such a *mandamus* could issue from a body of educated gentleman in relation to the study of a profession which does not meddle with religion in any shape or form. We believe we but re-echo the sentiments of hundreds of Catholic physicians throughout the country who have graduated at Medical Schools connected with Protestant Universities, when we say that during the entire term of their pupilage they never heard the question of religion raised by their professors in the class-room, and that they graduated good Catholics, having as sincere a respect and regard for their religion as when they became students of medicine. When the smoke and excitement of this *mandamus* cleared away, it was learned that apparently one little chance yet remained to Victoria, viz., an appeal to Rome by the Sisters of the Hotel Dieu, who in view of the relations which had so long existed between them and the Montreal School of Medicine and Surgery (Victoria College), and the legal position in which they might find themselves placed by closing the hospital to them, asked that things might continue as before. While waiting for the response to this

appeal, a delegate, in the person of the well known occulist in Montreal, Dr. Desjardins, left for Rome, in the apparently hopeless task of getting his Holiness the Pope to reverse the decision of the Council of Bishops. In the meantime the answer arrived for the sisters—they must obey—close the hospital to Victoria, open it to Laval. Surely every vestage of hope was gone now, and the almost hopeless task of Dr. Desjardins became a forlorn hope. Some of those connected with Laval waited on the Ladies of the Hotel Dieu to arrange for getting the entry of the Institution, when a difficulty arose, the nature of which we do not know, save that it showed that these good sisters felt their hearts still warm to Victoria, and still unwilling, after so many years of friendly contact, to cut them entirely adrift. Few who scanned the situation well but felt that the sky was very dark, and that Victoria seemed all but dead, and that she was dying nobly, fighting to the last. But on the 27th of August, news came to the school from Rome "open as usual," and to the Bishop of Montreal, to much the same effect. Why this sudden change is not known, save that a powerful pleader for Victoria was then there, in the person of one well calculated from his special line of professional work to take the dust out of persons' eyes. We need hardly say that the news spread like wild-fire, and was soon the topic of the city, while the friends of Victoria were profuse in their congratulations to each other. We too rejoice, not because we oppose Laval, but because we are opposed to any attempt to crush out a school, in the manner adopted by Laval University, supported by a powerful party in the Roman Catholic Church. At the same time we are glad that Laval has opened a Medical School in Montreal, and though she has not gained, as yet at all events, her desire that Victoria shall cease to exist, we hope to see her remain here, and work out her own destiny. Her advent, in spite of the bitter struggle, has done Victoria good, stimulating the latter's energies, many of them being in a latent condition. Victoria had thought herself monarch of all she surveyed, and in many ways had become a little fossilized. The existence of Laval, as a competitor to her in Montreal, has awakened her from her dream, and if her life be prolonged she will no doubt equal any school in Canada, in the means at her disposal, to teach the science and art of medicine.

DR. MORELL MACKENZIE ON "AMERICAN CATARRH."

In a recent number of the *British Medical Journal*, there is an abstract of a lecture delivered at the London Hospital Medical College by Dr. Mackenzie, on catarrh of the nasopharynx. A severe type of this disease he found to be so prevalent in America that he calls it a "*national complaint*," and names it "*American Catarrh.*' It is widely diffused over the continent but prevails principally between latitudes 44° and 38°. It is not as severe in Canada as in the United States. He attributes it to the irritant effects of *dust* in the air, for he says, "dust is to be found everywhere in America." He paints the following gloomy, picture:—"The universal prevalence of catarrh is, indeed, fully explained by the abundance of dust, both in the country and in the cities. Owing to the immense size of the country, and its sparse rural population, the country roads have not, as a rule, been properly made, and except in some of the older States, are merely the original prairie tracks. In the cities, notwithstanding the magnificence of the public buildings, the splendor of many of the private houses, and the beauty of the parks, the pavement is generally worse than it is in the most neglected cities of Europe; such indeed as are only to be found in Spain or Turkey. It must be recollected also that, whilst in the decayed towns of the Old World there is very little movement, in the American cities there is a ceaseless activity and an abundance of traffic. Hence the dust is set in motion in the one case, but not in the other. The character of the dust, of course, varies greatly according to the locality. In some parts, it is a fine sand; in others an alkaline powder; whilst in the cities it is made up of every conceivable abomination, among which, however, decomposing animal and vegetable matters are not he least irritating elements. An idea may, perhaps, be formed of the state of the atmosphere from a consideration of the fact that in many cities the functions of the scavenger are quite unknown. That a dusty atmosphere is the real cause of postnasal catarrh is rendered probable by a consideration of the anatomical relations of the nasopharynx; for owing to its being a cul-de-sac out of the direct line of the respiratory tract, particles of foreign matter which become accidentally lodged in its upper part are got rid of with difficulty, most likely by an increased secretion, which, as in the case of the conjunctiva, washes away any gritty

substance which may temporarily alight on the membrane. As regards the larynx, irritating dust is expelled by coughing, which may be either reflex or voluntary; and again, in the case of the nasal passages, the minute particles of matter which constitute dust are expelled, if they happen to be obnoxious, either by sneezing or blowing the nose. But reflex acts, such as coughing and sneezing, have no effect on the upper part of the nasopharynx, and it is only by a voluntary act known as "hawking" that this cavity can be partially cleared. It is probable also that, owing to the sensibility of the nasopharyngeal mucous membrane being less acute than that of either the nose or larynx, minute foreign bodies lodged accidentally in the vault of the pharynx do not cause an amount of discomfort at all corresponding to that in the adjacent parts; hence, particles of matter are more likely to remain in situ for a long time in the postnasal region, than in either of the other parts, and are, of course, very apt to set up disease. In this country, the complaint is most common in persons whose pharynx is large in the antero-posterior direction, a form of throat which facilitates the entrance without favoring the expulsion of foreign particles."

If Dr. Mackenzie's theory is correct, catarrh of the nasopharynx ought to be very prevalent in Montreal. It might be well to present each of our City Fathers with a copy of Dr. Mackenzie's lecture, as a gentle hint to improve the street-watering service, and as an additional argument in favor of permanent paving for our roadways.

HOMEOPATHY IN ENGLAND.

A homeopathic directory has recently been published in Great Britain. According to its pages there are two hundred and sixty practitioners of this class in Great Britain and Ireland, four only being in the latter country. As there are nineteen thousand nine hundred and forty-seven regular physicians, the ratio of homeopaths to regulars is, for England and Wales, one to sixty-four; for Scotland, one to one hundred and seventy; and for Ireland, one to six hundred and nine. Most of the homeopaths are in large towns; thus London has eighty-five, and Liverpool eleven. The contrast between the condition of things, as shown above, in England and in this country appears to be considerable. It is claimed that there are about six thousand homeopaths, so called, in the United States, giving a ratio to regular practitioners of about one to ten.

ANGLING DOCTORS.

The late Dr. G. W. Campbell was well known as one of the keenest salmon fishers in Canada, and we are glad to learn that the fascination of the sport is spreading among the profession. Up till a year or two ago Dr. F. W. Campbell, was the only other Montreal physician who regularly followed it. Last year Dr. R. P. Howard took his first lesson, and was so pleased that he tried it again this year on the Saguenay. Dr. MacCallum was initiated this season on the Jacques Cartier, and had excellent luck. Dr. F. W. Campbell passed a month at it this summer, making his camp first at the Forks on the Upsalquitch, N.B., then on the Restigouche, at the mouth of the Upsalquitch, and finally at Indian House on the Restigouche. Such outings are sure to give renewed health and strength to those who indulge in them, and who is more deserving of a good holiday than the hard worked doctor.

PERSONAL.

Dr. Fenwick, Professor of Surgery McGill University, returned from a brief trip to England, by the *Parisian*, on the 25th of August.

Dr. Roddick, Professor of Clinical Surgery McGill University, sails for Europe by the *Parisian* on the 8th September. He will be absent till next summer. His work at the College and at the Hospital for the winter season will be performed by his colleagues, Drs. Fenwick and Shepherd. We believe it is Dr. Roddick's intention to pass the winter in London, with a view of increasing his surgical knowledge and experience, and on his return to Montreal to devote his future professional career to the practice solely of Surgery.

Dr. C. E. Cameron (M.D. McGill, 1883) has taken the M.R.C.S. England.

Dr. Mewburn (M.D. McGill, 1881), House Surgeon to the Winnipeg Hospital, paid a short visit to Montreal this month.

Dr. Buller (Montreal), has been to and returned from the North-West.

Dr. Strange, of Toronto, and Dr. F. Wayland Campbell, of Montreal, have been appointed Surgeons to the Militia Infantry Schools of Instruction in the Provinces of Ontario and Quebec.

Mr. C. E. de Lamirande, the present detective officer of the College of Physicians and Surgeons of the Province of Quebec, has been gazetted inspector of Anatomy, under the new Act, for the Montreal District.

REVIEWS.

Insanity; its causes and prevention. By HENRY PUTNAM STEARNS, M.D.; New York; G. P. Putnam's Sons, 1883.

A plain and sensible book, written by a man who has devoted much thought to his subject, and has sufficient practical experience to speak with authority, is always welcome. Dr. Stearns, who is superintendent of the Hartford Retreat, and lecturer on Insanity at Yale, has produced an unpretentious but readable book. It is written as much for the general public as for professional readers, and is well worthy a careful perusal. While admitting the exciting effects of grief, shocks, fever, &c., in the production of insanity, the writer insists upon the pre-existence of the *insane diathesis*, and points out how this diathesis is most commonly produced and how it may best be guarded aganist. He urges the necessity of reforming our educational system so as to respect the individuality of each pupil, and avoid the evils of routine; for this purpose, he recommends that fewer pupils be entrusted to each teacher. He attaches considerable importance to industrial education, and strikes a sound note in calling attention to the necessity of careful *home training*. Obedience is the great lesson to be learned at home. The child who does not learn at home to submit to domestic regulations, is very apt never to learn obedience to the laws of the land; and the passionate self-willed child is apt to exhibit in after life so-called emotional insanity or irresistible impulse. Many other important subjects are discussed, such as heredity and marriage, the effects of alcohol and tobacco, the importance of sleep and recreation, etc.

Sore Throat; its nature, varieties and treatment. By PROSSER JAMES, M.D. Fourth edition, enlarged. Philadelphia: P. Blakiston, Son & Co.

Few writers upon the Laryngoscope are better known than Prosser James. In 1860, the first edition of this book was published; it was then the first text book on the Laryngoscope in the English language. Since then it has gone through several editions, and appears now thoroughly revised as one of Blakiston's Handbook Series. It is well got up, and its cheapness brings it within the reach of all.

CORRESPONDENCE.

To the Editor of the CANADA MEDICAL RECORD.

QUININE PILLS.

The publication in a Medical Journal, some time ago, of an article based on analysis of quinine pills of well-known brands, showing shortage, as might be expected, caused much commotion amongst the manufacturers concerned, and the Pharmaceutical Journals have been commenting on the subject ever since. At first the manufacturers contented themselves with raising objections to the unknown analyst, whose name did not appear, and to the medical editor. They also assumed that their reputations would sustain them against one assault. Subsequently an analyst, whom the manufacturers could not well attack, Diehl, of Kentucky, published his results, and these placed the pill-men in a worse position than before. Special pleading is now in order, the last effort we have seen, in this direction, being by Lloyd, of Cincinnati, in a paper read before the Indiana State Pharmaceutical Association, occupying five columns in N. Y. Druggist Circular for August. In it he elaborately argues that deficiency may be accounted for by the destruction of the quinine in the pill, by time and the complex excipients used in the mass, thus giving away the pill business badly.

It would seem that the pill-men ought to have a better defence than this, the amusing thing now is, that the manufacturers have been in the habit constantly of publishing analyses, in some cases by independent and competent chemists, showing the pills to be all right, and frequently, even, with a slight excess of the costly ingredient. As the analytical processes of pharmaceutical chemistry, are beyond the scope of the general practitioner, the latter will probably come to some such conclusions as the following, as the result of all this discussion, and his patients will be no sufferers thereby.

To avoid all ready-made pills, whether round, square or flat. To exhibit quinine in powder or simple solution freshly made. If the pill form is decided on; to prescribe the quantity desired in the pill and leave the manipulation and excipients to some dispensing chemist, in whom he has confidence, only stipulating that the mass be freshly made each time.

Yours, etc.,
T. D. REED, M.D.

Montreal, 29th August, 1883.

BIRTH.

At Emileville, St. Pie, on the 28th July, the wife of Dr. E. A. Duclos of a son.

THE CANADA MEDICAL RECORD.

VOL. XI. MONTREAL, SEPTEMBER, 1883. No. 12

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ABSTRACT OF THE ADDRESS DELIVERED AT THE OPENING OF THE SEVENTEENTH ANNUAL MEETING OF THE CANADA MEDICAL ASSOCIATION, KINGSTON, ONT., SEPTEMBER 5TH.

By J. A. MULLIN, M.D., PRESIDENT OF THE ASSOCIATION.

After thanking the members for the honor conferred in electing him to preside at this meeting of the association, he referred to the pleasure and advantage of attending these annual meetings, and hearing the views of representative men here assembled, all united in efforts to advance professional knowledge. He spoke with regret of the loss the association had sustained through the death of the late Dr. David, of Montreal, one of the oldest members who had discharged the duties of general secretary for many years, and was held in high respect by all. He alluded to the losses to the profession each year through death, notably in the last year that of Sir Thomas Watson, the author of the eloquent lectures on the practice of medicine, which had for many years been the guide of students of medicine. He referred to the importance of the annual meetings, uniting the members of the several local associations, and by holding the sessions in different parts of the Dominion securing the co-operation of the most prominent members of the profession. Its work has been successful in the past, and we have reason to be hopeful for this year, coming as we do to the old city of Kingston, one of the earliest centres of education in this Province, whose institutions are worthy of its history, and continue to influence the minds of our youth with a vigor corresponding to the growth of our country.

Adverting to the progress made in professional knowledge during the past year, he did not propose to traverse the whole field, but to confine his remarks to some of the investigations recently made respecting the influence of minute organisms in causing disease.

Lister stands foremost in advancing this branch of professional knowledge. His antiseptic method of treatment may not be, and indeed is not considered by himself an ultimate result beyond which it is impossible to pass, but the great merit of his work is, he first called attention to the agencies which effect the decomposition of organic substances. Some hold that these pass into decay as soon as life ceases, and having fulfilled their part, decay is inevitable; that their ultimate particles are held together by so loose a bond that the cessation of life gives the forces of chemical affinity power over them. Organic substances exposed to atmospheric influences, apart from those of vegetable life, will, in time, become decomposed; this, however, would be a slow process, for when pains are taken to prevent vegetable growth, decomposi-

tion is invariably retarded. On the other hand, as every housekeeper knows, the slightest indication of mould is a sure proof of incipient decay. Although the decomposition of organic matter through the influences of vegetable growth may seem opposed to the teachings of chemistry, there is no real antagonism, as both forces may come into operation. Certain chemical solutions are known to sustain bacteria. Several of these were here named in which bacteria are known to grow rapidly. On the other hand Pasteur and Tyndall have shown that even organic substances will remain long without evidences of putrefaction, though this speedily occurs when the first step towards it is taken by the introduction of vegetable life.

The modern treatment of wounds shows the pressing importance not only of preventing decomposition, but of recognizing what are its causes. Many successful practitioners agree with Dr. Gamgee who says: "That he has never been troubled with the idea that infection is always floating in the atmosphere ready to settle in the shape of impalpable and implacable germs into any breach which may be made in the surface of a living body, and that he believes life to be the great antiseptic." Life is undoubtedly the great antiseptic, and tissues instinct with life will best resist the malign influence of vegetable forms; but when wounded their fluids are not in their normal condition, and it is carrying out the principal of both rational and anti septic surgery to diminish their quantity and thus deprive vegetable growth of food for decomposition.

As regards the practice of medicine it is an important though difficult question to determine to what extent vegetable forms operate in the production of ordinary fevers,—that they do so to a considerable extent is the current belief of the medical profession. Dr. Murchison in '75 at the Pathological Society pointed out a chemical process, having resemblances to the multiplication of contagion. Several fermentations are now recognized to be due to the growth of distinct vegetable forms. Others are more purely chemicals, such as those produced by heat and acid. A peculiar vinous ferment has also been extracted from the madder root. These all induce chemical change without themselves entering into the resulting product. May not decayed or changed albuminous compounds act as similar ferments when introduced into the fluids of the body?

Fever-producing agents, it is now well recognized find a ready vehicle in water, but the separation of the active agent from the liquid is difficult, though recent experiments seem to show not impossible. Dr. Burdon Sanderson, by precipitating with alcohol and then extracting with water, obtained an extract which caused fever. He shows that this extract is not really in solution, though it has passed through filtering paper, it still contains particles which have the power of causing fever. He has ascertained that no animal poison is really soluble, and adopts a plan of filtering through porcelain by which a filtrate is obtained that does not produce fever; this filtrate differs from that which has passed through paper in this important particular, it is barren. The first filtrate has no bacteria, but particles are seen in it. An hour after bacteria are found in considerable numbers. The filtrate through porcelain shows no bacteria, and 24 hours afterwards remains barren. Now here the natural inference is that the fever-producing agents are to be found in particles and yet it is possible that an animal fluid in passing through the fine cells of porcelain may be chemically changed and that the absence of fever-producing energy is due to this change. It is well understood that all bacteria found in diseased tissues are not to be regarded as causes of disease. When an animal fluid begins to decompose bacteria are seen and the forms of vegetable life which appear depend upon the composition of the fluid. One specimen of urine will shew the bacterium terms; if sugar be present the tortula cerevisiæ also appears. In other specimens small round cells appear sometimes isolated, at other times in chains. So also it is probable that according to the tissue decomposing, different forms of bacteria are present, each form as it were choosing that tissue most suitable for its growth. Hence even if after death bacteria are found in any tissue, they cannot at once be regarded as causes of disease. It may be that in the dying body, the bacteria infesting the surface of the body and mucous-lining of the intestines in innumerable multitudes, may pass inwards to lay hold of the elements that are dead before the life of the whole body has ceased. This may serve to explain how it is that in different diseases similar forms of bacteria appear. It has been suggested that after all the diversity which is seen in fevers, several may depend upon the same bacteria, modified in the course of time with the circumstances of its growth. Should this seem start-

ling, we may remember that chemical bodies, composed of the same elements in the same proportions, are sometimes endowed with diverse qualities. Dr. Ogston has unquestionably shown that in cases of acute suppuration attended with fever, certain forms of micrococci are invariably present. A full statement was made of the minute and careful experiments of Dr. Ogston, of Aberdeen, respecting these organisms. He found that micrococci taken from an acute abscess and carefullytransferred to the albumen of an ordinary fresh egg reproduced themselves in myriads. He also found that if the minutest portion of this albumen were injected under the skin of a healthy animal similar abscesses resulted, abounding with micrococci. Repeated experiments, under the most careful conditions, produced the same results.

Ogston's experiments prepare us to receive the recent teaching regarding the cause of tubercular disease.

This disease brings with it conditions favorable to the growth of bacteria, for parasitic growths are known to flourish in weak organisms. The breaking up of tissues incident to this disease also furnishes most fertile soil for the growth of bacteria. It may be true, as affirmed, that the bacillus is invariably present in cases of tubercle. This the above considerations would lead us to expect, without looking to it as the sole cause of the disease.

Many questions respecting these minute organisms and their influence in life and disease are still to be settled, but their study has unquestionably led to much improvement in the practice of the healing art.

It is satisfactory to believe that these recent studies have confirmed old truths. As regards contagious and tubercular diseases. Our efforts to combat them must to a very great extent depend upon our success in teaching the public to rely less upon antidotes and more upon those means which tend to build up strong bodies capable of resisting the agencies causing disease. Our main hope of lessening the mortality from these diseases lies in carrying out by the public proper sanitary measures; and——

"By temperance taught,
In what thou eat'st or drink'st, seeking from thence
Due nourishment, not gluttonous delight,
Till many years over thy head return,
So may'st thou live till, like ripe fruit thou drop
Into thy mother's lap, or be with ease
Gathered, not harshly plucked."

THE BIRTH-PLACES OF YELLOW FEVER, AND ITS SO-CALLED PROPAGATION BY INOCULATION.

(Continuation of Translation).

By Wolfred Nelson, C.M., M.D.,

Member of the College of Physicians and Surgeons, Pro Que., Canada; late assistant Demonstrator of Anatomy Medical Faculty, University of Bishop's College, Montreal; late Physician Accoucheur to the Female Home; former attending, and late consulting, Physician to the Montreal Dispensary; late Board of Health and Quarantine, Panama, South America, etc., etc., etc.

Under the title of *The Birthplaces of Yellow Fever*, an article, translated by the writer from *La Estella du Panama*, appeared in the early issue of the Medical Record. It, as well as the article now appended, appeared in the Jamaica *Gazette* (official), under the date of July 12th and 26th, it having been forwarded to the Government of the latter Island by the Earl of Derby, Secretary of State for the Colonies. The readers of the Record will observe that the translation, made from the Portuguese, for the Colonial Office, is literal, and by a layman, which accounts for many errors. As the subject is sure to lead to a great deal of medical discussion by those skilled in the treatment of this dreaded disease, it is given word for word as copied for the *Official Gazette*:

TRANSMISSION BY CONTAGION.

"On the 14th we took from the heart of a person who had died of yellow fever an hour before "some grammes of blood in which the microscope "revealed the presence of the cryptococci that "are now currently considered to constitute the "charateristic of that disease. Those organisms "were in different phases of full development "from the size of small black points to that of large "round cells, grayish or dark, fringed with a brilliant point in the centre. Besides these were to "be seen masses of transparent granulations set in "a gangue of yellow pigment.

"We took one gramme of the blood, and, with "every care that the case required, our able assistant, Senor Menezes Doria made an intravenous injection in the great vein of a limb of a "rabbit. Fifteen minutes later tetaniform convulsions showed themselves with back-hollowing, "(opisthotanos?—W. N.), and the animal soon "succumbed, fulminated, so to say, by the violence of its virus so rapidly and directly intro-

"duced into its great circulatory torrent. At first "we suspected that some accident had caused the "death of the animal, such as air getting into its "vein, or some clot, but the operation was exe- "cuted with the utmost care, and the death in "those cases should have been sudden and "unaccompanied with the course of symptoms "just mentioned.

"On making the autopsy, we found visceral "congestions analogous to those that we had seen "in the corpses of yellow fever patients, and we "found in the blood the same cryptococci as "existed in the corpse that served for the inocu- "lation.

"If the death had been due to the quick action "of its cryptococci, and not to an accident, the "blood of the rabbit should, when itself inocu- "lated in another animal, cause the death of the "latter. To put this beyond doubt, we took a "gramme of the dead rabbit's blood and injected "it hypodermatically into a guinea-pig. Well, the "latter died at the end of some hours (in the "night of the 14th), and we found an extraor- "dinary quantity of cryptococci in its blood, and "saw also the anatomo-pathologic lesions which "usually characterise cases of yellow fever in man. "The death of the second animal was evidently "due to contagion, and showed that the rabbit "whose blood was inoculated, contained in itself "its transmittory virus, and succumbed to the "influence of its virus.

"Not content with this, we injected a gramme "of the guinea-pig's blood under the skin of an- "other guinea-pig, and in the space of some hours "this one appeared feverish, oppressed with cold, "ears and paws trembling, and rejecting (?) "blackish dejections. A drop of this animal's "blood showed an infinity of cryptococci, and "within a little time it also died.

"By these experiments we have proved, there- "fore, contagion and transmission of the disease "four successive times. The sick man received "it from the medium in which he lived, from him "we passed it to the rabbit, and from it to the "guinea-pig, which, in turn, transmitted it to an- "other guinea-pig. In all the four cases the blood "showed swarms of cryptococci.

"In this manner we are able to produce "epizootics in the animals in our laboratory, by in- "oculating many at once with microbiated blood. "These facts, therefore, prove beyond doubt that "yellow fever is propagated by contagion from "individual to individual; that it is primitively a "contagious disease, but may become infectious "as soon as sufficiently many fœcuses accumulate. "They also prove that the disease does not reside "exclusively or especially in any one organ, it "resides in the blood, and, therefore, in all the "organs the blood traverses."

The writer again wishes to state, that he has made no alteration in the translation in the subject matter of this article. It appeared in the *Official Gazette* of July the 26th, 1883, of the Jamaica Government.

Dr. Domingo Freire considers that he and his assistants, by the repeated experiments have fully established the parasitic nature of the disease, and that the cryptococci found in all cases of yellow fever, are those already dwelt on at length in my June letter to the RECORD, and named by Dr. Freire the *Cryptococci Zanthogeyicus*.

Dr. Freire also refers to the discovery by him of an alkaloid-jot in the black vomit of malignant cases. This extractive matter he has isolated. He states that it exists as a salt. He claims to have reasons for believing that the alkaloid is a direct product of the excretion or secretion of the cryptococci, which he further adds does not prevent both the alkaloid and the parasites from being factors of the diseased state. As obtained by him, the alkaloid is a liquid of aromatic odor, oily, acrid; combined with water it forms an opalescent emulsion, soluble in alcohol and ether. It turns litmus a deep blue, and he further adds, "it must contain a good proportion of nitrogen, as it gives out abundant ammoniacal vapors when heated in contact with potash."

As a result of further experiments by cultivating cryptococci in gelatine in a Pasteur's tube, he says that the color of black vomit is not due to altered blood, but to the parasites, that he terms *Cryptococci Zanthogenicus*, and thus he produced an artificial black vomit. A culture of the earth cryptococci, that referred to in my June translation last, on this theme, from the grave of a man who had died a year previously of yellow fever, also produced artificial black vomit.

He conducted further experiments with earth from the same grave. A guinea-pig was taken: the animal was perfectly healthy, and a careful microscopic examination of its blood showed it to be normal. The pig was shut up in a small place, with a quantity of this earth. It died after five days, and its blood was literally filled with *crypto-*

cocci, in various stages. Its urine was albuminous, and the brain and intestines were yellow—being studded with the peculiar pigment of the parasites.

In conclusion he says:—"In view of such facts, "how can it now be said that the germs of yellow "fever disappear with the burial of the corpse. "On the contrary, the cemeteries are perennial "focuses of contamination, particularly so as re- "gards the epidemic diseases whose parasitical "natures are now accepted."

"Corroboration of part of the above is also "afforded by Dr. Aranjo Goes' experiments with "blood from the liver of a yellow fever patient; "Dr. Goes considers the liver the special seat of "the disease. With a culture from the blood of "the liver, on a slice of bread, he obtained a "fungus, and succeeded with the latter in com- "municating yellow fever to various fowls, "guinea-pigs and a monkey, by inoculations, "injections, and direct introduction into the "stomach."

A future letter will be devoted to this subject, in which Dr. Domingo Freire's statements will be duly criticised. The careful reader will have noticed how Dr. Freire has deceived himself in propagation of the *so-called* yellow fever.

Panama, South America,
Aug. 23rd, 1883.

REMARKABLE CASE OF OBSTETRICS.—ABORTION AT TWO MONTHS AND QUADRUPLETS AT FULL TIME.

By Drs. Edwards and McTaggart, of London, Ont.

On the 21st of July, 1883, we were called to see Mrs. S. of this city; patient of small stature, English by birth, age 38, average weight 100 lbs., height 5 feet 1 inch. She is the mother of four living children, two boys and two girls, aged 12, 10, 8 and 7 years. There was nothing unusual at any of her previous confinements, never had a miscarriage before.

On abdominal examination we found the abdomen extremely enlarged and pendulous. We advised support from the shoulders. She told us that she was but five months *enciente*, but from her history and condition we assured her that she was seven months pregnant. Patient always enjoyed good health; her menses being regular. She last menstruated on December 4th, 1882; about seven weeks from this time she commenced to flow, which lasted for some three weeks, accompanied by pain. With a pain resembling a labor pain something was expelled which she described as a lump of flesh with blood vessels in it. To this "lump" was attached a short string. At this she became alarmed, and consulted a medical man who assured her that she had had a miscarriage. He prescribed some medicine which he said would check the flow and cause the expulsion of anything that might remain. From her account the flow increased for a few days, then finally stopped. From this time until Friday, the 14th September, 1883, she has been, comparatively speaking, quite well although distressed by the immense size and weight of the abdomen. On the evening of this date (Friday, 14th September), she was delivered of four living children, two boys and two girls; the time elasping between the birth of the first and that of the last child being one hour and forty-five minutes. The weight of the male children exceeded that of the females by a few ounces. Weight of males, 4 lbs. 9¼ oz. and 4 lbs. 3 oz.; females, 4 lbs. 6 oz. and 3 lbs. 13¾ ozs. Labor terminated favorably, there being no hæmorrhage to speak of. There was but one placenta, each cord being inserted at different parts of its surface. The quartette are now six days old, all healthy, able to nurse and bid fair to live. The mother is doing exceedingly well, having suffered no more exhaustion than if she had had but one child.

We might here say that the father, Mr. C. S., is English by birth, age 41, height 5 feet 6 inches, and average weiget 169 lbs., is a strong, healthy and robust man.

Society Proceedings.

MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

Stated Meeting, June 14th, 1883.
R. A. Kennedy, M.D., President, in the Chair.

Hodgskin's Disease.—Dr. Osler exhibited th patient, a farmer, large and well-built, 24 years of age, with good family history. Enlargement of glands began 18 months ago. The cervical and axillary very large; inguinal slightly enlarged, but not the thoracic nor abdominal. Not markedly cachectic, but looks much older than 24 years. Says he is much darker than before disease began. Not specially anæmic. There is one-

fifth of a reduction of red blood corpuscles, one colorless to 150 red. Left arm is œdematous from pressure of mass in axilla. One gland over left clavicle necrosed. Has continuous pyrexia, very little pain, slight cough. Has had an itchy papular eruption for past year. This known to be sometimes present in this disease, Dr. Osler said it was a typical case, and was the third he had seen this spring. Is giving him arsenic; has seen glands lessen with this remedy in two cases.

Dr. Osler shewed specimens of *Hydatids* under the microscope. They were from a patient of Dr. MacLaren's, of Paisley, who had been passing them for some time in his urine. Dr. Osler had tabulated sixty-three cases, in none of which were they found in the kidney. It is possible these may have come from peritoneum and into bladder.

Dr. Osler showed a *tympho-sarcomatous growth of bronchial glands* in a patient under Dr. Wilkin's care. It involved portions of both lungs and pleuræ. Secondary growths were also found in pancreas and on membranes of spinal cord. The latter was the cause of death, its rapid growth and pressure on cord producing acute myelitis.

Dr. WILKINS stated that patient had been brought into hospital about eight or ten days previous to his death, in a completely paraplegic state; he had been so for ten days. For about five or six weeks previous to the setting in of the paraplegia, he had been complaining of "rheumatic" pains in his shoulders, and also in his legs, but had been quite well up to that time. The paraplegia with bladder trouble set in within twenty-four hours of his first noticing any loss of power in limbs. On entering hospital there was complete anæsthesia and paraplegia extending up to level of sixth costal cartilage. He had typical bullæ on internal surfaces of both knees where they had been in contact, on buttocks and on one external malleolus, points to early irritative lesion of posterior roots on cornua. Muscles responded to a strong faradic current when he entered hospital; but this faradic excitability had quite disappeared the day previous to death. The only objective symptom pointing to a lung lesion, was the presence of bronchial râles.

Dr. Osler exhibited a *large amyloid liver* from a patient who died of phthisis under Dr. Wilkins' care.

Dr. WILKINS stated that the case had been one of several years' standing, during all of which time patient had more or less profuse expectoration; lower margin of liver extended to crest of ilium, and about one inch below umbilicus. No unusual symptom was associated with the case, until about a fortnight previous to his death, when jaundice made its appearance, the color gradually becoming very deep. Dr. Wilkins had considered the occurrence of jaundice with amyloid liver as of very rare occurrence, and in this case had supposed it to be due to the pressure of enlarged lymphatics on bile ducts, the cause usually assigned for this condition. At *post mortem* glands were found to be only slightly enlarged, and ducts previous, and as he had not yet made a microscopical examination, he could not give any positive reasons for the jaundice.

Dr. Wilkins exhibited a number of microscopical sections made from different regions of spinal cord of a patient who died of myelitis, in which the microscopic as well as the physical signs shewed the posterior cornua to have been less affected than the anterior. There had been complete loss of power of both legs, with paresis of muscles of arms, hyperæsthesia; a bed-sore making its appearance only after the sixth week of illness. Under the microscope, some of the motor ganglion cells could be seen swollen to more than twice the normal size; others with one or more large vacuoles, which gave the appearance of the ganglion being filled with fat cells, but their reaction with prussic acid shewed they were not fat; other motor ganglion cells existed only in a shrunken condition, some with these processes quite disappeared. In all the sections leucocytes could be plainly seen scattered through the field. The sections were all double stained—some with sulph-indigotate of soda and carmine; others with picrocarmine and logwood.

Uterine Fibroid.—Dr. Gardner exhibited fragments of a uterine fibroid removed by him assisted by Dr. Ross, whose patient she was. Patient had been blanched with hæmorrhages; on examination uterus was found enlarged. Dilatation by means of tents revealed a sub-mucous fibroid, size of an egg. Repeated applications of strong solution of iodine did not stop the hæmorrhages. Again dilated and separated the tumor by Thomas' scoop and a pair of scissors. The operation was very difficult as the tumor was sessile. Iodoform was used as a dressing, it kept everything sweet. No hæmorrhage since removal, now three weeks.

Dr. ROSS said that fourteen months ago she began to have excessive flowing, gradually grew

worse, lost much each month. After a time an examination was allowed, when he found the above condition to be present. It took two and a half hours to remove the tumor. Her condition in spite of having a small growth size of a marble in right cornua, is very satisfactory.

Dr. ALLOWAY asked if Dr. Gardner ever used Emmet's traction operation for uterine fibroids, which in time produced a pedicle.

Dr. GARDNER believed Emmet's operations to be very good; but not suitable for this case, as the base of the tumor was so large, being something like a hump on the uterine wall.

Tracheotomy.—Dr. ALLOWAY read a paper embodying the history of 6 cases of tracheotomy in children, 4 of which ended in recovery. The ages ranged from 2 to 7 years. Three were males and three females. Of the recoveries two were females and two males; of deaths, one male and one female. The ages of those which recovered were two, three, three and seven years, respectively. In two there were diphtheritic patches recognized in the throat; the remaining four were membranous croup. Of recoveries, two were subject of diphtheria and two membranous croup. In the successful cases the tube was removed on the seventh, eleventh, thirteenth and fourteenth day. Steam and carbolized dressing were used in all; the steam was not generated directly in the room, but obtained from boiling water kept constantly supplied to large flat tin vessels on the floor of the room. The operation in all was performed early.

Dr. BELL said he had recently performed tracheotomy four times for diphtheria. All were bad cases in young children, and had to be done in a hurry, as children were cyanosed. First case, 3 years old; opened below thyroid; lived about forty-eight hours; membrane went below wound; no *post mortem*. Second case, 3¼ years; within forty-eight hours the wound was covered with membrane. Applied glycerine and carbolic acid; died fourth day; *post mortem* shewed membrane in small bronchii. Third case was brother to the last, no membrane seen, but great relief followed opening trachea; took nourishment well for thirty-six hours; tough secretion now formed, and forty-eight hours after operation was almost suffocated by it; was relieved by passing feathers down and removing secretion, this gave great comfort, and had to be repeated frequently; died after four days; *post mortem;* no membrane in trachea, but died of lobular pneumonia from pushing down dry secretion with feather; temperature ran high. Fourth case; membrane in trachea was relieved by operation, but gradually sank; died from infection seventeen hours after operation. Did not steam with any of these cases.

Dr. BELL read following extracts from a paper on this subject by Dr. H. Linder:—

Out of 106 cases of tracheotomy for croup and diphtheria 63 died and 38 recovered. Of 79 cases in which obstruction of air passages was the prominent morbid condition, 44 died. The chances are slight under two years. Operate when retraction of chest becomes a prominent sign. Superior operation done in all but 5 cases. Prefers it on account of thymus gland in young children. He recommends chloroform in all cases except where intense asphyxia. When the signs of great general infection were marked, that is in 22 cases, all died. Uses steam, thinks it useful in lessening the dry and firm secretion at end of tube; but thinks it produces pneumonia sometimes, and increases danger in that way. Recommends apomorphia in large doses. It increases watery secretion from bronchi and separation of membrane. Next to general infection thinks that pneumonia is chief difficulty, and is indicated by sudden rise of temperature.

Dr. BLACKADER said he believed steam to be very useful in these cases. Lately he had seen its good effects in a patient of his suffering from laryngeal diphtheria on whom Dr. Roddick had operated. One day the steam (which was directed under a tent over the bed) was discontinued by the attendant, when the child became alarmingly worse, but after being renewed she breathed easier and ended in a complete recovery, although was paralyzed for a time.

Dr. FENWICK advocated use of steam. Although last year had two cases of tracheotomy for diphtheria where, owing to lack of accommodation, steam could not be used and yet both recovered.

Dr. RODDICK had performed the operation thirty odd times. He said his rules were: 1st. To dissuade from operating if glands engaged, for the patients are almost sure to die of septicæmia, and the operation hastens the fatal issue. 2nd. Has given up the idea of operating with a single assistant; must have two, one to give anæsthetic and one to assist the operator. Believes ether better than chloroform. Never saw ether act badly. Made a rule now of doing the low operation, raising the thoroid is easy and simple, the lower part of isthmus being loose on the trachea.

Uses no haste in putting in tube, has known the tube to be put to one side and be the cause of death. Believed Trousseau's old double tube, with or without moveable shield, to be the best; always uses steam, thought it very necessary.

Drs. Alloway, Roddick and Bell had all seen cases where there was much difficulty in permanently removing the tube, owing to suffocating symptoms coming on, due to spasm and also exuberant granulations in the trachea, which stand out and lessen calibre when the pressure of the tube is removed.

Dr. MAJOR considered that a record of tracheotomies, to be of any statistical value, required to be divided as to the condition for the relief which the operations were undertaken. In his experience opening the air passage in diphtheria has proved eminently unsatisfactory—*in so far as life-saving power was concerned*—whereas for the relief of other conditions it had been universally successful—in any case the more early the tracheotomy the better. He would also call attention to the neglect of laryngoscopic examinations. He thought, when none was had, that both patient and practitioner were at a great disadvantage; as at least we might determine the character of the obstruction; whether œdema, membrane, (diphtheritic or croupous), or as he had even seen papillomatous growths mistaken for croup, and an operation so long delayed that a fatal termination from congestion of the lungs was the result. And we should also know whether the membrane extended below the point of our proposed incision, a matter of some moment in deciding upon operative procedure.

CANADA MEDICAL ASSOCIATION.

Sixteenth Annual Meeting, held at Kingston, Ontario, September 5, 6 and 7, 1883.

KINGSTON, the old capital of Canada, offers certain advantages for the meeting of a medical association. Though a town of only sixteen thousand inhabitants, the profession comprises men of considerable energy and ability. For thirty years it has been the seat of a medical school—the Royal College of Physicians and Surgeons—which is in affiliation with Queen's University. There are two hospitals: the General, a Protestant and the Hôtel Dieu, a Catholic institution. The Provincial penitentiary is situated here, and has about six hundred inmates, and there is a large asylum for the insane, with five hundred patients. Queen's University, the Presbyterian college of Canada, is a well-endowed institution, with about two hundred students. The Military College of Canada is also here. Situated at the east end of Lake Ontario, close to the Thousand Islands, the city is unusually well placed for excursions, etc.

SEPTEMBER 5TH, FIRST DAY.—MORNING SESSION.

GENERAL MEETING.

The meeting was called to order by the PRESIDENT, Dr. JOHN MULLIN, of Hamilton, Ont., and the Association was warmly welcomed by the Mayor on behalf of the citizens, and by Dr. Sullivan on behalf of the profession.

Dr. Hunt, of the Asylum for the Insane at Pontiac, Mich., Prof. McLean, of Ann Arbor, Mich., Dr. Walker, of Detroit, delegate from the American Medical Association, and Dr. Dorland, of Milwaukee, delegate from the Wisconsin State Medical Society, were invited to the platform.

After the reading of minutes and election of members, the reports of committees were then taken up.

Dr. CANNIFF, of Toronto, as Chairman of the

SPECIAL COMMITTEE ON VITAL STATISTICS,

reported that the committee had never held any meeting, and that he had been frustrated in his efforts to secure a grant from the Dominion Government for the collection of vital statistics. He read letters showing that this had been caused by Dr. Larocque, Dr. Playter, and others calling a convention at Ottawa, and forming a separate society, for which they succeeded in getting a grant from the Government.

Drs. PLAYTER and LAROCQUE explained their connection with the convention referred to, and showed that the matter was entirely an oversight. They were under the impression that the special committee of which Dr. Canniff was president had ceased to exist after last year's meeting.

Dr. LAROCQUE, of Montreal, read a most exhaustive report from the

COMMITTEE ON CLIMATOLOGY AND PUBLIC HEALTH,

which was received.

Dr. OLDWRIGHT noted two or three points which he thought should be discussed. The first of these was the subject of local boards of health. He

thought the efforts of the Association should be used to have these established in all parts of the Dominion by the various Provincial governments. Other important subjects were the reporting of contagious diseases to the authorities and the licensing of plumbers. He thought, also, that the removal of sanitary legislation from the Provincial to the Federal Government, as recommended by the report, would be a mistake. There was sufficient work for both. The Dominion Government should attend to such subjects as adulteration of food, immigration, and commerce and manufactures.

Dr. YEOMANS remarked that a systematic report of contagious diseases was furnished to all the schools of Hamilton, by means of which the mortality among the school-children had been reduced and the attendance at the schools increased.

A vote of thanks was tendered to Dr. Larocque for his able report.

Drs. Botsford, G. E. Fenwick, Grant, Graham, Rogers, Bray, Worthington, Malloch, Gliver, Tye, Sweetland, Canniff, Oldwright, and the President were appointed a

SPECIAL COMMITTEE ON NOMINATIONS.

Dr. METCALF extended an invitation to the members to make a

VISIT TO THE ASYLUM.

at their convenience, after which the meeting adjourned to meet at 2 P. M.

AFTERNOON SESSION.

The afternoon session opened at 2.30, and the first business was

THE PRESIDENT'S ADDRESS,

in which Dr. MULLIN briefly returned thanks for the honor which had been conferred upon him, and then referred to the presence of both old and young physicians. They were both welcome, especially the former, whose attendance shewed that their eyes were not dim, nor their natural forces abated. A brief allusion was made to the death of Dr. David, of Montreal, late Secretary of the Association. It had been remarked that the itinerancy of the Association had been opposed to its usefulness and jeopardized its existence, yet every meeting gave increased confidence in its success. All who attended its sessions recognized the advantages derived from every place where it had met. Each had given its special contribution to the success of the Association, and in each place it had elicited the cordial support of the profession. We look for continued success when we reflect on the standing of the profession in this vicinity, and remember that we have come to an important centre of education and culture. Every member of this Association gladly recognizes that the institutions of this city remain worthy of the history of Eastern Ontario, and exercise their influence over the youth of the present with increased vigor, corresponding to the growth of our country. He said that the importance of the annual meeting could not be over-estimated. Each of the medical societies had its spheres of usefulness; the country, city, and provincial associations could do work that would advance the interest and knowledge of the members of the profession, but the highest and best results may be attained by the Association gathering to it each year the members of the profession from all parts of the Dominion, who in the discussions would reflect the progress they were able to make. All cordially agreed with the remarks made by the president of the Ontario Medical Association at its late meeting, who referred to the relationship of the various local societies to the Dominion Association, and indicated that while each worked in its own sphere, all should co-operate and endeavor to promote the work of the Dominion Association. The speaker said he would not attempt even a slight sketch of the work of the past year, but would confine himself to one subject—the agencies through which the decomposition of organic substance was effected. As practitioners of medicine all must recognize that while chemical affinities might and do play their part, the decompositions referred to were attended with and seemed to be dependent upon the growth and development of vegetable forms. He referred to the several experiments that had been made in support of this theory. He concluded by saying: "Our knowledge at present is in accordance with that long since found true, that as regards contagious fevers and tubercular diseases our efforts must depend to a great extent on our success in teaching the public to rely less upon antidotes and more upon those means which tend to build up strong frames capable of withstanding the agencies causing disease; that our main hope of lessening the mortality from these diseases lies in the carrying out by the public of proper sanitary measures, and, as regards the individual, attention to the laws of health."

MEDICAL SECTION.

Dr. GRAHAM, of Toronto, in the chair.

DIET AS A THERAPEUTIC AGENT.

Dr. PLAYTER, of Toronto, urged the necessity and importance of proper diet in acute and chronic maladies, and spoke of the ailments induced by the habitual consumption of an excess of food.

In the remarks which followed, Dr. REEVE, of Toronto, stated that he believed that many cases of phlyctenular ophthalmia in children were caused by over-eating of fresh fruit. He had known nstances in which fruit had been given in considerable amount to sucklings.

Dr. GRAHAM referred to the important influence of food in skin affections; many acute attacks depend upon peculiar sorts of food, while many chronic maladies may be produced by either a defective or excessive diet.

INVAGINATED AND GANGRENOUS BOWEL.

Dr. SHEARD, of Toronto, presented the specimen, and read notes of the case. The specimen showed eight or nine inches of the ileum invaginated in the colon and gangrenous. The patient, a man aged thirty-seven, had a right inguinal hernia, which became strangulated, and was reduced. but without the cessation of the prominent symptoms. A tumor appeared in the right iliac region, and Dr. Burns opened the abdomen, when the condition above described was discovered. The hernia was omental, and apparently had had noth ing to do with the intussusception. The man died shortly after the operation.

Dr. OSLER looked upon this as an example of cases in which recovery sometimes takes place by the sloughing of the piece of small bowel invaginated. In cases of impacted fæces, with acute symptoms, would give opium in preference to purgatives

Dr. MULLIN said that in cases of obstruction from any cause, he would treat the acute symptoms in preference to operating.

INFLATION OF THE LUNGS BY ABDOMINAL AND THORACIC TRACTION.

Dr. BOTSFORD, of St. John, N.B., described the method which he believed might be of some service in cases of suspended breathing in drowning, during anæsthesia, or in new-born children. By means of pieces of plaster, four by four inches, fitted with rubber rings, and applied on the abdomen or lower thorax, traction could be made in such a way as to draw down the diaphragm. The doctor had not had an opportunity of trying his method, but he thought the suggestion might be of some value.

Dr. BURNHAM, of Toronto, late House Surgeon at the Royal London Ophthalmic Hospital, stated that in that institution they had had no deaths from anæsthetics for six or seven years, though, of course, among the very large number anæsthetized every year many cases occurred in which methods of resuscitation had to be employed. In a case of danger one assistant straddled the patient and exerted pressure on the abdomen, while a second performed artificial respiration with the arms. Inhalation of amyl nitrite was employed, and believed to be of the greatest value.

Dr. GRANT thought the method not practicable. In a recent case lowered the head with good results.

SUCCESSIVE DROPSIES OF THE AMNION, ALWAYS SPECIFIC.

Dr. DORLAND, of Milwaukee, Wis., presented the report of six cases in which, in successive pregnancies, the amount of liquor amnii was in great excess, and in all evidence of syphilis could be obtained. In several of the cases specific treatment seemed to be successful in preventing the condition, which had occurred in previous pregnancies. The cases were given in detail, and the doctor had had the patients under observation for some years, all of them having occurred in family practice.

Dr. OLDRIGHT asked if the result was not due to the absorbent action of the iodide rather than to its anti-syphilitic properties.

Dr. OSLER asked if any of the children were dropsical, this condition being frequently seen with dropsy of the amnion.

Dr. SHEARD asked if there were any changes seen in the placenta.

Dr. MULLIN had frequently seen dropsy of the amnion, which he considered due to syphilis. How long would Dr. Dorland keep his patient under treatment?

Dr. YEOMANS had seen cases of excessive liquor amnii in healthy women, where there was no evidence of syphilis.

Dr. DORLAND replied that none of the children were dropsical. No appreciable changes in the placentas. Would keep the woman on specific treatment from the second to the seventh month of pregnancy.

MEDICAL ETHICS.

Dr. DUPIUS, of Kingston, read a paper on the *Relation of Medical Men to Each Other, and to Each Other's Patients*, which was largely a plea for free trade in medicine.

Dr. Harrison, of Selkirk, Dr. Canniff, of Toronto, and Drs. McCannon and Oliver, of Kingston, repudiated warmly the opinions expressed by Dr. Dupius, and there appeared to be a very general feeling that a mistake had been made in permitting such a communication to come before the Society.

HYOSCYAMINE IN THE TREATMENT OF MENTAL DISEASES.

The results of six years' experience with the drug were given by Dr. METCALF, of the Kingston Asylum. Of the two preparations of Merck, the crystalline was preferred. The dose given was from one-twelfth to one-eighth of a grain, hypodermically. Two great advantages were promptitude and certainty. In sixty patients treated in all forms, no ill-effects had followed, and very many were benefited. One full dose was usually given daily; if after a few doses no benefit followed, the use of the drug was discontinued. In some forms recovery appeared to follow; six cases of severe mania were all benefited, and it seemed advantageous in all forms of maniacal excitement.

Dr. HURD, of Pontiac, Mich., had little to add to Dr. Metcalf's experience. The drug appeared to change the mental action. Intoxication may be produced. He had found particular benefit in cases of melancholia with persistent refusal of food. It appeared to change the delusion on which the refusal depends. In these cases he gave small doses of one-twenty-fourth to one-forty-eighth of a grain. In one patient choreiform movements appeared, ceased with the interruption of the medicine, and reappeared when again administered. It seemed to increase the appetite, and the patients often awoke hungry. It should never be given in large doses where there is any fatty degeneration of the heart.

Dr. DANIEL CLARKE, of the Toronto Asylum, thought that the drug should be more widely used by general practitioners in cases of delirium tremens, acute mania, and melancholia with suicidal tendency. He used Merck's preparation, and also the tincture (B. P.), not in the ordinary doses, but as much as one and a half ounces. He had found the greatest benefit in sthenic mania, and if it is to do good, two or three doses will suffice.

Dr. THORBURN, of Toronto, suggested caution in the use of such doses of the tincture as recommended by Dr. Clarke. He had a lively remembrance of the introduction by Jones, of Jersey, of large doses of digitalis in delirium tremens. He gave two instances in which a fatal result had apparently been caused by large doses of this medicine.

Dr. TROUTMAN, of New York, had had much experience, and placed great reliance on the drug. It is contra-indicated in acute delirium with dryness of tongue and muscular tremors. It is also injurious in general paresis with much excitement.

LEPROSY IN NEW BRUNSWICK.

Dr. GRAHAM, of Toronto, read an exhaustive paper based on a study of the leper settlement at Tracadie, N.B. The region in which the disease appears has about two thousand inhabitants, chiefly French-Canadians, who live on small farms, and also engage in fishing and hunting. The diet is mainly fish, potatoes, and bread, with but little meat. They are partial to stale fish, preferring it to fresh. Large families live in small rooms. He had made a thorough investigation into the family history of the various sufferers, and presented interesting genealogical charts. At present there are only twenty-four patients in the Lazaretto, and the average length of residence is five years. A few cases are at large, and it is chiefly through the influence of the priests that they are detected and secluded. Dr. Graham's conclusions are as follows:

1. Although it has been shown in other countries that the disease can be propagated purely by hereditary influences, no case has yet been recorded in Tracadie, so far as he could learn, which would prove that theory.

2. That the disease was imported from without, and, finding favorable surroundings, it spread from one to another by contagion. In order to contract the disease, certain conditions appear necessary: (*a*) low state of the system. It has been noticed in Tracadie that persons die from very slight ailments, and that there is very little power of resisting disease. (*b*) To belong to certain race or family. The Le Bretons among the Tracadie families entirely escaped. (*c*) Lengthened and intimate contact with leprous persons with frequent opportunities for inoculation.

SURGICAL SECTION.

Dr. TYE, of Chatham, Ont., in the Chair.

IMPERFORATE ANUS WITH FECAL FISTULA.

Dr. FENWICK, of Montreal, narrated the case which was that of a man admitted to the General Hospital with a remarkable malformation of the lower bowel. There was a small opening at the site of the anus, and another at the root of the penis, just in front of the scrotum. The orifice in the perineum was the result of an operation for imperforate anus shortly after birth. The canal in the perineum leading from the rectum appeared like a direct continuation of the bowel. The case was a very unusual one, and it was decided to close the perineal canal, which was done without much difficulty. Prof. McLean, Drs. Walker, Holmes, and Bethune took part in the discussion.

RETROVERSION AND RETROFLEXION OF THE UTERUS.

Dr. WORTHINGTON, of Clinton, read a paper on four interesting cases.

The condition was alluded to briefly in general terms, and then the notes of four interesting cases were given. In the third case, immediately on commencing a vaginal injection of hot water, the patient was seized with violent pelvic pain and symptoms of collapse, followed by a severe attack with symptoms of peritonitis, and lasting for many days, but ending in recovery. The cases were treated with varying amounts of success by the Hodge-Smith pessary.

Dr. GARDNER said everybody who treated such cases knew how troublesome they were, and that in a certain number it was next to impossible to give relief. He alluded to a practice of Lawson Tait, who, incidentally in a few cases after the operation for removal of the uterine appendages, had raised the fundus of the uterus and sutured it to the abdominal wall. He believed the practice justifiable, and thought that, in view of the modern small mortality after abdominal section, it might, in the future, be a perfectly justifiable operation, probably quite as safe and much more successful than the practice of Erich of Baltimore and Schultz of Jena, who both had, under ether, after dilatation of the uterus, forcibly stretched or torn away the adhesions which so often prevent replacement. The division of the adhesions was more certain than their stretching. In many such cases, however, it must be borne in mind that the conditions which complicate displacements are really more important than the displacements themselves. With reference to the symptoms of collapse in one of the cases, it shewed the great care necessary in prescribing such a simple remedy as a vaginal injection of warm water. It was not necessary, in such cases, that the water should reach the peritoneal cavity. Water is a fluid foreign in its nature to the endometrium, and he believed that simple contact was enough in certain cases of susceptibility from idiosyncrasy. Analagous consequences had followed the passing of a sound through the male urethra. As regards the uterus, there is evidence to shew that the nearer the lining membrane is to a condition of health the greater is the danger of such results. He (Dr. Gardner) had now under treatment at the University Dispensary for Women in Montreal an obstinate case of chronic endometritis, in which intra-uterine injections of pure carbolic acid always gave relief.

Dr. HOLMES always recommended to his patients the fountain syringe, a cheap form of which he described. He takes care that the nozzle has no central aperture. He never uses the sound to replace the uterus, but invariably places the patient in the knee-chest position, and makes pressure on the fundus. In the case of adhesions, he gradually stretched them, and in illustration related a case in which repeated attempts in this way led to success, the patient became pregnant, and went to full term.

Dr. TYE related two cases of fatal results after vaginal injections which had come under his notice in consultation with other physicians.

Drs. FULTON and HINGSTON also took part in the discussion.

FEMORAL HERNIA.

Dr. CAMPBELL, of Seaforth, Ont., read the notes of a case of femoral hernia in which he had operated successfully after three and a half days' duration of the symptoms, which were of such a character as to make the diagnosis very obscure.

Dr. Hingston complimented Dr. Campbell on his frankness in stating he had not recognized the strangulated hernia till late, the symptoms being obscure. Surgeons could well understand and appreciate like difficulties. He (Dr. H.) thought the advice given by a gentleman, in discussing the paper, of using much greater force than is usual in attempting reduction was unsafe. Pressure should be gentle, and directed to the return of the *last* extruded portion, if that could be made out. Force was not warranted in *strangulated* hernia; but in

old and large herniæ which were constantly occurring through large openings, somewhat more force might be used, the bowel having acquired a greater tolerance of manipulation. He recalled a case where a heavy-handed surgeon, called late, had succeeded in, and was credited with, reducing a hernia; but collapse quickly followed, and a post mortem established rupture of the intestine. In strangulated hernia the danger was in inverse ratio to the size,—the smaller the hernia the more difficult of recognition—and, when recognized, the more difficult to make patients and friends understand the necessity for immediate surgical interference. He thought it unsafe to allow too many to attempt taxis. The attendant should call in a skilled professional brother; and, taxis failing, he should operate at once. Large hernia could be afforded time, but not small ones. In his experience he had often regretted being obliged to operate too late, but never too early—as early operations generally did well; and late ones badly.

Sometimes the usual symptoms were absent, and sometimes local pain and other symptoms are misleading, and mentioned a case where excessive pain, with nausea, and vomiting; and swelling in left crural region were caused by hernia of left ovary. The organ was returned without difficulty.

Dr. RODDICK thought that surgeons were sometimes too chary in the use of force in taxis. He related a case in point. It was that of a woman who has had several attacks of strangulation with the usual symptoms. He has always been able by taxis to reduce the hernia, but on two or three occasions, during his absence from town, friends of his who had seen the case for him had failed, and were preparing for operation, when a further use of force succeeded in reducing the hernia.

Dr. OLDRIGHT said that if taxis is to succeed it must be employed early.

Dr. FENWICK had recently seen Prof. Lister, and was told by him that he (Dr. L.) cuts off the sac and sutures the edges of the incisions with good results. Dr. F. had removed the omentum in a case of double ovariotomy. The patient recovered.

Dr. SAUNDERS, of Kingston, thought Dr. Roddick's advice might, if followed, by inexperienced medical men, lead to dangerous results. He had seen a case in which another medical man had ruptured the bowel by efforts at taxis.

Dr. MCLEAN, Ann Arbor, believed that a new era was dawning in the treatment of hernia, and that operations for the radical cure of hernia will soon be much more frequently performed than they are now.

Dr. SULLIVAN (Kingston) thought it a mistake to wait for urgent symptoms before operating. He had known some cases where vomiting was absent.

Dr. BETHUNE mentioned a case of radical cure of hernia after a kick on the truss worn over the site of descent.

Drs. TYE and SLOAN had found it necessary in some cases to use a good deal of force in the taxis.

Dr. GRANT related a remarkable instance of a tumor simulating hernia.

PARACENTESIS PERICARDII.

Dr. MCDONALD, of Londonderry, N.B., reported a case in which over twenty ounces of pus were removed from the pericardium and recovery took place.

EXPERIMENTS ON RESECTION OF THE BOWEL.

Dr. JAMES BELL, of the General Hospital, Montreal, gave the results of a series of experiments in which he had removed portions of the bowel in dogs, the length of the pieces ranging from a few inches to a foot and a half or two feet. In almost every instance the animal recovered perfectly, and when killed at a later period perfect union was found with no narrowing of the calibre of the gut. A series of specimens illustrating the experiments was shown, and the paper concluded with a description of cases which the writer had observed in which abdominal section and removal of portion of the bowel would have been justifiable.

THURSDAY, SEPTEMBER 6TH, SECOND DAY.

MORNING SESSION.

GENERAL MEETING, 10 A.M.

After the reading of the minutes, Dr. FULTON, of Toronto, read the

REPORT OF THE COMMITTEE ON NECROLOGY,

and gave a list of thirty-seven members of the profession who had died since the meeting in Toronto last year.

Dr. THORBURN, of Toronto, presented the

REPORT ON EDUCATION,

and referred more particularly to the establishment of schools of medicine for women in Toronto and Kingston. He congratulated the Province of New Brunswick on the steps which had been taken to advance the standard of education in that province by establishing a Medical Council and an Examining Board.

After the election of new members, the Association adjourned to the sections.

The PRESIDENT announced that those gentlemen interested in sanitary matters would meet and organize a

PUBLIC HEALTH SECTION,

in order to consider the best ways of furthering the establishment of the proposed sanitary association.

MEDICAL SECTION.

Dr. GRAHAM, in the chair.

PIGMENTARY DEGENERATION OF THE RETINA.

Dr. TOBIN, of Halifax, N.S., gave an interesting case of four deaf-mutes in one family, all of whom presented characteristic symmetrical changes in the eyes in the form of scattered pigment masses on the retinæ, often in stellate forms. The parents were cousins. A full account of the disease was given, and the cases supported the views of Liebreich and De Wecker, who believe that a considerable proportion of them occur as the result of consanguineous marriages. A fifth case was also described.

Dr. BULLER, of Montreal, had seen very many instances of the kind, and had never succeeded in tracing any connection between consanguinity and pigmentary degeneration; nor had he been more fortunate in trying to associate, as done by some writers, these cases with hereditary syphilis.

GENERAL HYDRARTHROSIS OF THE SMALLER JOINTS.

Dr. FIFE FOWLER, of Kingston, showed a child with enlargement of the smaller joints, wrists, ankles, and phalanges, due apparently to effusion. There had been enlargement of the spleen and the child had been out of sorts for many months.

DR. MORTIMER GRANVILLE'S PERCUTEUR.

Dr. BURNHAM, of Toronto, showed the instrument and explained its mechanism. He had brought it from London for a relative affected with persistent tic, which had resisted all modes of treatment, but had apparently been cured by the use of the percuteur. About one hundred and fifty percussions were made in the second. Dr. Granville had found it very beneficial in neuralgias and the lightning pains of tabes.

SOME POINTS IN CHRONIC BRIGHT'S DISEASE.

Dr. OSLER, of Montreal, referred: 1. To the fact that so many cases of chronic Bright's disease were unsuspected, and the physician was first called to see the patient with one of the grave manifestations, cerebral or otherwise; cases were given in illustration. 2. To some peculiarities in the onset of the uræmic symptoms; two cases were given; one in which violent mania ushered in the uræmic attack in a man in whom no kidney trouble had previously been suspected, and a second, a woman, in whom pronounced hysterical symptoms preceded an attack of uræmic coma. 3. To the occurrence of fatal uræmic symptoms at a very early stage of renal cirrhosis, while indeed the coarse appearances of the kidneys were fairly normal. Two instances were given of sudden and fatal uræmic symptoms in men—apparently healthy—and the condition of the kidneys was such that they would have passed a superficial inspection, but on microscopical examination changes were found in the form of atrophy of some of the tufts and slight epithelial alterations.

Dr. Graham spoke of the great importance of the sphygmograph in the diagnosis of these cases, and referred to a remarkable instance of chronic Bright's disease in which, with pronounced uræmic symptoms and finally death, the amount of urea was not reduced.

SURGICAL SECTION.

Dr. TYE, of Chatham, in the Chair.

Dr. HOLMES, of Chatham, read an interesting paper on *Erosions of the Female Urethra*, which was discussed by Drs. Fulton and Sheard.

Dr. HINGSTON, of Montreal, showed to the Section a *note-book* which he had prepared *for ovarian and abdominal tumors*, and which he thought might be of some service. In this book he goes very fully into the question of diagnosis, and suggests such questions, as are likely to eliminate error in diagnosis.

Dr. MAJOR, of Montreal, described the various *tumors* met with in *the naso-pharynx*, and the modes of removal. Several interesting specimens were shown.

Dr. OLDWRIGHT read the notes of a case of *Fibro-myxoma of the Thigh*, and exhibited the specimen.

Dr. PROUDFOOT, of Montreal, read an article on *Color-Blindness*, and exhibited Thomson's instrument.

This affection was described a hundred years ago, but it had received comparatively little attention till within a few years past. Helmholt's theory of this affection was discussed, and the dangers to life and property from the inability of railway and steamship employes to appreciate color-signals alluded to. Dr. Joy-Jeffries of Bos-

ton had done much to draw public attention to the dangers from this cause, and the necessity for examination by experts of all candidates for positions in which the capacity to detect colors is necessary. Legislative Acts, with necessary provisions, are in force in Germany, Great Britain, and several of the States of the American Union, but no such Act has, as yet, been discussed in the Canadian Legislature.

PUBLIC HEALTH SECTION.

A meeting of the health officers and others interested in sanitary matters was held to discuss the proposed Sanitary Association. Dr. SWEETLAND, of Ottawa, was appointed Chairman, and Dr. CAMPBELL, of Seaforth, Ont., Secretary.

Mr. BOXER, C.E., of Montreal, was invited to address the Section, and state what steps had been taken in the way of organization.

Dr. OLDWRIGHT moved, seconded by Dr. Robillard (Ottawa): "That in the opinion of this Section it is desirable that a Canadian Sanitary Association be formed for the purpose of assisting in the diffusion of information, and engaging in discussion regarding sanitary subjects, and to aid by its influence the various bodies which are or may be formed for introducing and carrying out sanitary measures among the people of the Dominion." Carried.

Mr. BOXER then presented the scheme which had been framed for the establishment of a Public Health Association for the Dominion, and after discussion the meeting adjourned.

The afternoon and evening were spent in an excursion among the Thousand Islands.

FRIDAY, SEPT. 7TH, THIRD DAY.

MORNING SESSION—GENERAL MEETING.

After the reading of the minutes, on motion of the Secretary, the papers of Drs. Buller, Workman, Brouse, and Gardner were taken as read.

Dr. SAUNDERS, of Kingston, called the attention of the members to a remarkable case of *Tumor of Bones of the Skull* in a child in one of the anterooms.

The Nominating Committee reported the following list of

OFFICERS FOR THE ENSUING YEAR:

President.—Dr. Sullivan, of Kingston, Ont.

Vice-Presidents.—Ontario, Dr. Thorburn, of Toronto; *Quebec*, Dr. Robillard, of Montreal; *New Brunswick*, Dr. Christie, of St. John; *Nova Scotia*, Dr. McDonald, of Londonderry; *Manitoba*, Dr. Lynch, of Winnipeg.

General Secretary.—Dr. Osler, of Montreal.

Treasurer.—Dr. Sheard, of Toronto.

Delegates were appointed to the American Medical and the American Public Health Associations.

Montreal was chosen as the *next place of Meeting*, the date to be arranged by the President and Secretary in order to place it a few days before that of the British Association for the Advancement of Science, which meets in Montreal towards the end of August, 1884.

An invitation to meet in Winnipeg was received, but it was thought that in a year or two the means of communication would be better, and the members from the older Provinces could then get there with less inconvenience.

Dr. BRISTOL, of Napanee, and DR. THORBURN, of Toronto, brought up the question of the *Standing of Militia Surgeons*, and moved a series of resolutions embodying changes which it was hoped the government would be able to effect.

The routine business was then transacted, after which the Association adjourned.

Progress of Medical Science.

GOOD REMEDIES OUT OF FASHION.

In an address on this subject, delivered at the Annual Meeting of the Metropolitan Counties, Branch of the British Medical Association, by the President, Dr. C. J. Hare, late Physician to University College Hospital, the lecturer made some interesting observations on emetics and bleeding.

"It is not long ago that, in a very urgent case of bronchitis, I advised the administration of an EMETIC; when the gentleman whom I had been called to meet in consultation said, "why, I never gave an emetic to an adult in my life." In former times, it was not unusual, on the contrary, to commence the treatment of many diseases with the administration of a dose to procure vomiting; and although the remedy might then be given sometimes indiscriminately and according to routine, only those who have seen the effects of emetics, properly and judiciously given, can conceive the beneficial effects they sometimes produce. In the early stage of an attack of croup it was by no means unusual to give an emetic of tartarized antimony or of ipecacuanha; and it is in accordance with the recorded experience of some of the best authorities and most practical men, and quite consonant with my own experience too, that symptoms which presented the most certain augury of a severe attack were by these means cut short, the

hoarse voice resumed its natural character, and the feverish symptoms were in a few hours relieved. I know quite well that a great fear is entertained by some as to the depressing effects of emetics; but the fear is theoretical, and not practical, and those who have had most experience in the administration of them best know how groundless the fear is. In diphtheria, too, I have seen the false membranes which are out of the reach of local remedies, and in which the patients cough and cough in vain, and utterly exhaust themselves to get quit of, readily brought up by the action of vomiting, to the immense relief of the sufferer.

"In suffocative bronchitis, the effect of emetics is sometimes magical, and by their administration in such cases not only is immense relief given, but I verily believe—I am certain—that lives are saved. You are called to a patient who has been ill a few days, with increasing dyspnœa; she is sitting up in bed [I draw from nature], for to lie down is impossible; she is restless, and tossing about; the lips, and indeed the whole face, blue; the eyes watery and staring; the pulse quick and small: the cough constant; the expectoration semi-transparent and tenacious; over every square inch of the chest, front and back, from apex to base, you find abundance of rhonchi; moist, sonorous and sibilant ones in the upper part of the lungs, and muco-crepitant or mucous *rales* towards the bases. Ammonia and stimulants, right and good in their way perhaps, in such a case are too slow in their action; the patient is in fact, more or less slowly, more or less rapidly, suffocating. An emetic of twenty-two grains of ipecacuanha in an ounce of water is given; in ten or fifteen minutes, the patient vomits, and brings up a huge quantity of that tenacious mucus, and the whole aspect of the case is altered; the distressed countenance is relieved; the breathing is at once quieter; and the patient is able for the first time for the past twenty-four hours to lie moderately low in bed, and get some sweet refreshing sleep. The patient is, in fact rescued from the extremest peril, and in this case, and in many similar ones too, I believe, from otherwise most certain death. Of course, in such cases the emetic is not given for its effect on the stomach, but for its collateral effect in mechanically clearing out the enormous amount of secretion which accumulates in the bronchial tubes, and which the patient otherwise is quite incapable of getting quit of; and thus the half-choking, almost asphyxiated, condition is changed for one of comparative comfort, and time is gained for the action of other appropriate remedies. No doubt the secretion may and often will accumulate again; and I have not hesitated again in bad cases to repeat the same good remedy; but it is a fact, and a very positive one too, that, quite contrary to what those who have had no experience in the plan suppose, the system rallies instead of being more depressed under the action of the remedy.

"There is a class of cases in which the rght heart is engorged with blood, and in which the only hope of rescuing the patient from death is by bleeding. A man of middle age (I again draw from nature) has considerable chronic bronchitis, with some congestion of the lungs, and, like many other unwise persons, he goes to a southern watering place, instead of remaining in his room and in a uniform temperature. Becoming worse, he determines to return home, and travels on a cold spring day; his dyspnœa is so much worse on the journey that his friend and the fellow-passengers doubt whether he will arrive home alive; and when his carriage meets him, it is with the greatest difficulty he is conveyed to his house, and got into his drawing room. You are at once sent for, the message being that the patient is dying, and when you arrive you find that that is the fact. He is sitting in a chair (to lie down is impossible for him), his face is blue and swollen, his lips purple, the eyes suffused and staring, his heavy gasping breathing you have only too distinctly heard and recognized as you ascended the stairs, and when you see him you find his chest heaving, and each short gasping inspiration followed by a long wheezing and moaning expiration; his lungs are full of moist sonorous, and mucous and submucous rhonchi, and scarcely a trace of vesicular respiration is to be heard, and he is pulseless. He looks to you beseechingly, and gasps out, in scarcely articulate words that he is dying. This is but too true. Now, the treatment for such a condition at the present day is "to pour in stimulants" (though the patient can scarcely swallow). Brandy and water are given, and ammonia, and perhaps ether; then, if the patient live long enough to have them made, mustard poultices are applied to the chest, and to the calves, and to the feet, and the patient is fanned, and the patient dies. Something has been done, but that which true pathology—and, indeed, common sense, unshackled by prejudice, custom and fashion—would dictate, has been left undone. Appearances have been saved but not the patient's life.

"The fact is, that here the danger lay in the right side of the heart being gorged with blood, so that it was impossible for its stretched and distended walls to contract and to propel forwards the thick and blackened blood. Oh, as you value your patient's life, as you value the blessed consciousness of being a minister who has done everything possible for his welfare, let me beg of you not to be contented with the futile treatment of to-day; relieve that poor oppressed distended heart, and all may be well! Open one of those veins which are, with every systole of the heart, tending to carry more and more blood to this already distended right ventricle, and all may yet be well with your patient. Sometimes this blood-letting, in extreme cases, is no easy matter; it may be necessary, before you can effectually open the vein, to place the patient's arm in warm water, so as sufficiently to distend the vein; and even when the ligature has been efficiently applied, and the vein well opened, you may

have to press and squeeze and rub upwards the arm before a drop of the thick and tarry blood will flow. But, when it does flow at length freely, oh, what a marvelous change may you see take place!—the breathing becomes quieter, and deeper, and less noisy, the haggard face resumes the appearance of tranquility, the blueness of the skin is replaced by a more natural tint, the pulse becomes more and more distinct, and, in a word, the choked up heart is set free. This is no fancy, picture. Every word is simple truth, and I appeal for confirmation to the memory of every senior member present who recollects the experience of his earlier days, and who can also tell you that the after progress of such cases was sometimes almost miraculously rapid, so that in a few days even the patients might become convalescent."—*British Medical Journal.*

CLINICAL LECTURES ON BRIGHT'S DISEASE.

By Austin Flint, M.D.,

Professor of the Principles and Practice of Medicine, and Clinical Medicine, in Bellevue Hospital Medical College.

Delivered at Bellevue Hospital, New York.

Gentlemen,—In connection with the cases which I shall have the pleasure of showing you to-day I desire to make some general remarks on the subject of Bright's disease and its varieties. We may enter upon the study of Bright's disease from two different points, the anatomical and the clinical. In connection with the first we would carefully study what is known as the large white kidney, the fibroid or contracted kidney, and the waxy kidney, and finally the different varieties as they are liable to occur in combination; for you must not forget that two or more of these may be found in the same subject. From the clinical standpoint we may consider the symptoms: *first*, those pertaining to disease of the kidneys in general; and, *secondly*, those characteristic of the special varieties. Of course, this is a very large subject, and I shall not attempt in a single lecture to give any exhaustive *resumé* of it; but I will, at all events, introduce two or three cases which will serve to illustrate some of the points of diagnosis to which I wish to direct your attention.

Now that our first patient is before us, I find that his condition has improved so greatly since I saw him a few days ago in the wards that I shall not be able to point out to you to-day some of the most characteristic appearances of his disease, which were at that time very strongly marked. And this, I may say in passing, occurs not infrequently in the experience of the clinical lecturer; for patients often improve so rapidly under the efficient treatment which they receive in the hospital that by the time that he is able to present them in public to the class some of the most prominent characteristics of the case may have almost entirely disappeared or else have become very greatly modified. A short time since this man had a well-defined dropsical face, the bulging under the eyes being especially marked, but all this has now quite disappeared. You observe, however, that he still has considerable pallor of the countenance; but even this is much less marked than it was. Passing now to the abdomen, we find the evidence of liquid in the peritoneum still, although this also has greatly diminished in quantity. On palpation we can readily get the distinct thrill or impulse which is diagnostic of fluid. The ascites has diminished to such an extent that we shall forego the operation of paracentesis, which I expected to have had done before you to-day, and which, on account of the inconvenience which he suffered from the presence of so much fluid, the patient was himself quite anxious for. In the lower extremities I can still get the pitting on pressure which is the physical criterion of œdema; but here, as in the other portions of the system, the condition is very much less marked than it was a few days since. Let us see if we find the same evidence of œdema over the sternum. Yes, I get a distinct indentation. The presence of this sign at this special point is a matter of considerable practical importance. In a patient like this, who has hydro-peritoneum (which is usually accompanied by more or less œdema of the lower extremities), we wish to find out whether the dropsy is a local one, or whether it is general. The pitting at the sternum shows conclusively that there is general anasarca. In the present instance there could have been no question of this a week ago, as the dropsy of the face was then so marked.

But now a few words more in regard to the condition of the abdomen here. Although the belly is much smaller than it was, you can see that it is still very materially enlarged, while the œdema of the face has entirely disappeared. This, again, suggests a practical point. When a patient has general anasarca, due either to renal or cardiac disease, the amount of liquid in the peritoneum corresponds with the quantity of serum diffused generally; but if the hydro-peritoneum is out of proportion to the dropsy of the rest of the body, there must be a local cause which makes the hydro-peritoneum more marked. In the present case, then, we have both a general and local dropsy, and I think I shall probably not err if I say that the latter is due to cirrhosis of the liver.

General dropsy, as you know, is due to two great causes, disease of the heart and disease of the kidneys, or to both in conjunction. In the case of this patient, therefore, the question arises. Have we cardiac or renal trouble? In determining this we can judge to a great extent by the countenance and general appearance. You observe that there is no cyanotic discoloration of the face and no dyspnœa. There is, however, well-marked pallor; and the external appearances would consequently lead us to decide that it is probably the kidneys that are at fault. If there

were sufficient cardiac trouble to give rise to general dropsy, there would unquestionably be considerable duskiness, if not well-marked cyanosis, about the countenace. But we need not depend on this test. When we make an examination of the heart we find that there is no evidence of disease there, and hence by exclusion we arrive at the kidneys as the seat of trouble. Going a step further, we investigate the condition of the urine, and we find in it the unmistakable and definite evidence of renal disease.

I will next recite to you from the house-physician's book the chief points in the history of this case. The man is thirty-five years of age, and a stone-cutter by occupation. About ten months ago he noticed that his penis was swollen, and a short time afterwards this swelling extended to the scrotum, lower extremities, and other parts of his body. He also suffered from headache and dimness of vision, and spots frequently floated before his eyes. Six or seven months ago his belly became very much swollen, and he had to give up work. He was admitted to the hospital four months ago, and it was found that his urine contained forty per cent. of albumen, and hyaline, granular, and fatty casts. The cardiac dulness was increased. Shortly after admission twenty ounces of clear serum were removed from the right side of the chest. (Hydro-thorax, I may say here is usually confined chiefly to one side.) Since he has been in the hospital his abdomen has been tapped a number of times, and the different quantities of serum removed have been 240 ounces, 218 ounces, 295 ounces, and 334 ounces respectively. The record goes on to state that the patient's sight is markedly effected, and that both eyes show white and hemorrhagic spots upon the fundus.

From this history there is no question of the presence of Bright's disease. The next point which we have to decide is, which variety of the affection have we here to deal with? We ask first, has this man the waxy kidney? It might, perhaps, be supposed that as the dropsy of the abdomen is out of proportion to that of the rest of the body, the hydro-peritoneum is due to waxy liver; and that, since the liver is waxy, there is reason to infer that the kidneys are effected by the same form of degeneration. It is a fact, however, that we do not get much ascites with waxy liver. Again, it does not appear from the history of the case, or has suffered from syphilis, disease of the bones, or other causes of waxy degeneration. Has he, then, the contracted or the large white kidney? In this case we have symptoms that point to both varieties; the large amount of albumen and the large amount of dropsy are both indications of the latter; so that if these symptoms existed alone we should say that it was a case of large white kidney. But we have here, in addition, distinct evidences of uræmia in the headache, the dimness of vision, and the changes in the appearance of the *fundus oculi*. It is therefore probable that both forms of disease are present in this patient. Sometimes with chronic contracted kidney we have occurring from time to time attacks of acute diffused nephritis, which give rise to large quantities of albumen in the urine.

The important points of diagnosis to remember are that early dropsy and a large amount of albumen in the urine point to the large white kidney, and that evidences of uræmia point to fibroid kidney. With the contracted kidney we may have no dropsy whatever, and the only indication of renal trouble be found in the uræmia present. In such causes there is a train of symptoms which belong to deficient excretion of urea. We have little or no albumen, but there are headache, derangement of vision, and disturbances of the digestive function. In the latter nausea, either with or without vomiting, is most significant, and the peculiarity of this nausea is that it is apt to occur in the morning or at other times when the stomach is empty. There is sometimes, in addition, looseness of the bowels. These are the minor signs of uræmia. The graver signs are coma, convulsions, inflammation of serous membranes, œdema of the lungs, œdema of the glottis, a form of dyspnœa not dependent on any abnormal condition of the lungs, but originating, probably, in the nervous centres of respiration.

I will now call your attention to another patient, John S., a native of Ireland, forty-three years of age, and a hostler by occupation. He was admitted to the hospital a month ago, and the history which he gave of his case was as follows: For more than six months he was troubled with headaches, and felt quite weak. Let me pause for a moment at this point to say that there is a great deal of significance in this simple statement. It is not uncommon for patients to state that they cannot accomplish nearly as much as they formerly could, on account of a feeling of fatigue, and when a person in middle life tells you that he feels thus weak, and, in addition, that he has frequent headaches, it is always important that you should look into the condition of the kidneys. The record goes on to say that about two weeks before admission he began to have pains in the small of the back, and had to give up work. It is a common popular notion, I find, that pain in the back is connected with disease of the kidneys. Pain in this location is not, however, an important symptom in Bright's disease, and when it is present in this affection it is much more apt to be due to the condition of the muscles in connection with the general weakness of the system incident to it than directly attributable to the pathological changes taking place in the kidneys themselves. The large muscles of the back always have a great strain upon them, and whenever the system becomes reduced from any cause pain and weakness is exceedingly apt to be felt in them. But to go on with the history. One week later the face, abdomen, legs and feet became very much swollen, but after another week this general swelling had disappeared. He complains that the urine sometimes

gave him a burning sensation when he passed it. He feels nauseated at times, but has never vomited. The nausea of Bright's disease, I may remark, is very like that of pregnancy, and whenever a patient complains of nausea (and especially if this nausea is generally experienced on waking in the morning), it should at once excite a suspicion of Bright's disease in your mind. In this patient the symptom seems liable to be felt at almost any time, occurring later in the day, as well as early in the morning, and this is sometimes the case. He complains also of slight dyspnœa on going up stairs. When first taken sick he says that he used to see stars, but I do not regard this as of as much significance as mistiness of vision. His bowels are regular.

The patient certainly has no general dropsy now. Has he renal disease? When he was admitted the urine was found to be amber-colored, turbid, and acid in reaction; its specific gravity was 1018; it contained thirty per cent. of albumen, and he passed ninety ounces daily, or about double the normal quantity. Later he passed one hundred and thirty ounces, although the specific gravity remained as high as 1015, which is certainly unusual with such a large quantity of urine. This condition of affairs would naturally excite a suspicion of diabetes mellitus, but the house-physician informs me that the urine has been examined for sugar, and that none was found in it. I will digress here for a moment to speak of a patient who called to see me to-day on account of some neuralgic pains, from which he was suffering. and whom I recognized as a gentleman who had consulted me ten years ago, although I did not recall at first what the matter was with him at that time. When I questioned him in reference to his urine, he said that he had not noticed anything abnormal about it, but when I happened to come near his person I at once noticed in his breath the characteristic odor of diabetes mellitus. On looking into my books I ascertained that I had found sugar in his urine ten years ago. The man did not want to have diabetes, and so he endeavored to deceive me as well as himself in regard to his real condition. It is thus that patients sometimes try to conceal grave diseases they which have, while in other instances they would have us believe that they are suffering from affections which exist only in their own imaginations.

This large quantity of urine is itself a very suspicious circumstance. If an individual has polyuria (with no sugar in the urine), and at the same time gives distinct evidences of uræmia, you can at once make a diagnosis of chronic Bright's disease. Furthermore, if the specific gravity of the urine is low, you can say with considerable positiveness that the patient has fibroid or contracted kidney. The microscopic appearances of the urine are not given in the record of this case. I will now examine the patient's heart. If I find it enlarged, but without valvular lesion, it will afford another very strong point in favor of the existence of contracted kidney. If, however, the heart is not found to be enlarged it does not by any means follow that there is no such diseased condition. In secondary enlargment of the heart the left ventricle is the seat of the hypertrophy, and consequently there is an intensification of the aortic second sound. On making an examination I do not get this here, but it is often, as I said, an important confirmatory evidence of contracted kidney. The condition of the urine, of course, affords certain therapeutical indications. Not long since I saw in consultation a patient with Bright's disease, who was passing a large quantity of urine, and the attending physician actually told me, with a considerable degree of complacency, that he had succeeded in reducing it quite noticeably. To reduce the quantity of urine, I need hardly say, is the last thing that we should think of attempting in such cases, for this large amount of urine is in reality the safeguard of the patient.

Before closing I will present to you still another patient. The history of the case is rather imperfect, as the man is not only a foreigner (a German) who does not speak English, but seems to be decidedly lacking in intelligence. The only account that he gives of himself is that he became weak about a fortnight before he entered the hospital which was only three days ago. His urine was then scanty and high-colored, and his bowels were constipated. His feet and abdomen were swollen and he complained of cough and shortness of breath, but no headache. On examination it was found that there was fluid in the peritoneum and on both sides of the chest, the larger quantity being on the right side. The urine had a specific gravity of 1018, and contained fifteen per cent. of albumen and hyaline and fatty casts. During the first twenty-four hours he passed only six ounces of urine. During the second, twenty-five ounces, and during the third thirty-three ounces. Yesterday he had chills, and the temperature went up to 103° F., but to-day the temperature is normal. The general dropsy and the condition of the urine are evidences of kidney disease, but I am not as yet prepared to say whether there is any additional trouble present or not. The patient states that he is emaciated, and this would suggest that he is also suffering from some malignant affection, as renal disease does not often produce this effect. As there has not been time or opportunity for a more thorough examination of the case, however, we will suspend our opinion in regard to it for the present. As the increase in the quantity of urine has been quite remarkable since he entered the hospital, it may be of interest to you to know that he has not been taking any diuretic remedy but merely the tincture of the chloride of iron.—*Boston Med. and Surg. Journal.*

TREATMENT OF ENLARGED PROSTATE.

Dr. William S. Savory thus writes in the *Lancet*, March 3, 1883:

When complete retention of urine from enlarged

prostate occurs, it frequently happens that the introduction of an instrument is followed by temporary return of power to micturate; and in other cases of partial retention it is well known that the occasional passage of an instrument will for a while restore the ability to empty the bladder almost completely without help. The cause of the difficulty being a mechanical one, I suppose there can be little doubt that the introduction of an instrument does good in this way by pressing aside that portion of the enlarged prostate which is most immediately concerned in producing the obstruction. Now much more good in this direction, and good, too, which will last much longer, is often gained by retaining a catheter for some time after it has been introduced—say for one or two hours or so, as the patient may be able to bear it without distress. This plan is well worth trying in most cases of the kind. When an instrument has been passed whatever difficulty there may have been in its introduction has been overcome, and the patient is subjected to little or no additional trouble by its retention for a short period. I may add that for this purpose a silver catheter appears to me to be of more service than a flexible one. It will be observed that this plan of repeatedly retaining an instrument for an hour or so after it has been passed is quite distinct in principle and purpose from the practice which has been advised, and is sometimes adopted, in cases of complete retention, or of very frequent micturition, or where there is unusual difficulty in the introduction of an instrument, of retaining it for many hours, or even days, together. The object here is either to escape a difficulty which may become insuperable, or to avoid the necessity of passing an instrument so frequently as to make this a source of grave irritation and further mischief. Here, unfortunately, the proposed remedy is often worse than the evil. The plan now advocated has been suggested with the view of taking advantage of the passage of a catheter, when it is required to relieve the bladder, to retain it for its effect upon the prostatic portion of the urethra; for the good it does in this way of restoring or improving the power of micturition, or possibly by pressure promoting in some degree absorption. In speaking on this subject, I would add that in my experience, as in that of others, in cases even where the prostate is considerably enlarged, it is often easier to introduce a catheter with an ordinary curve than the instrument which is especially made for cases of this description. Surgeons know very well that sometimes when a prostatic catheter cannot be easily passed, an instrument with a much smaller curve will easily slip in. I fancy that the advantage on the side of the smaller instrument is more common than it is generally supposed to be. With me, at least, it is the rule; and so, to relieve the bladder in cases of enlarged prostate, I should take first an instrument of full size with an ordinary curve, or a curve not exceeding the quadrant of a circle of two inches or so in diameter.

INFANTILE CONSTIPATION.

In connection with the means of overcoming this troublesome condition, that we have recently noticed, the following suggestions of Dr. M. C. Hatton (*Lancet*, July 14, 1883) may prove serviceable:

Take one quart of bran meal, tie it up in a pudding-bag so tight as to get a firm, solid mass, put it into a pot of water early in the morning, and let it boil till-bed time; then take it out and let it dry. In the morning peel off from the surface and throw away the thin rind of dough, and with a nutmeg grater grate down the dry hard mass into a powder. Of this, from one to three teaspoonfuls may be used, by first rubbing it into a paste with a little milk, then adding it to about a pint of milk, and, finally, bringing the whole to just the boiling point. It must be given through a nursing-bottle.

OZÆNA.

In several cases of chronic inflammation of the nasal and pharyngeal cavities, giving rise to offensive discharge, Dr. Poore has found decided benefit result from the use of a stimulant and antiseptic snuff, having the following formula:

℞	Biborate of soda,		
	Nitrate of bismuth,	aa	3 j,
	Disulphate of quinine,		x grs.,
	Iodoform,		v grs.

This snuff has the effect of stopping the fetor and greatly diminishing the amount of discharge from the nostrils. It is liable, as are all snuffs when used for similar conditions, to cake in the nostrils, and it is therefore necessary to thoroughly wash out the nostrils once a day. This may be done by means of a nasal douche, or the patient may easily be taught to snuff a lotion up the nose and allow it to run out of the mouth. A teaspoonful of glycerole of borax dissolved in a wineglass of tepid water forms an excellent wash for the nose, and with a little instruction patients learn how to wash out their nasal and pharyngeal cavities without aid either of syringe or douche apparatus. In cases where the ozæna is of a simple kind, not due to caries or necrosis of bone, but rather to a sluggish, inflammatory action occurring in a scrofulous subject, considerable benefit is often derived from the administration of the sulphide of calcium in doses of half a grain (in pill), taken three times a day. It is often necessary to cleanse the nasal and pharyngeal cavities with a brush inserted through the anterior nares, and also behind the soft palate, so as to reach the summit of the pharynx. The brush may be moistened with glycerole of tannin, and after the cavities have been cleansed a little iodoform may be passed into the cavities on the tip of the brush.—*London Lancet.*

CRACKED NIPPLES.

By J. H. Bencher, Athens, Clark County, Mo.

Permit me to occupy a small space in your valuable journal in relating the best treatment for cracked nipples that I ever tried. The condition had bothered me a great deal until I concluded that the local application of the sub-nitrate of bismuth might be of benefit. I prepared it as follows:

℞ Bismuth sub nit., ʒ ij.
Vaselini, ℥ j. M.

Sig.—Apply to the nipple each time after the child has nursed, and cover with a soft cloth. The ointment should be washed off before applying the child again to the breast. This remedy may not be anything new to many of your readers, but it may help some who have never tried it. With me the results have been perfectly satisfactory.—*Peoria Med. Monthly.*

SURGICAL EXPEDIENTS IN EMERGENCIES.

R. J. Levis, M.D., surgeon to the Pennsylvania Hospital and to the Jefferson College Hospital, read the following at Medical Society of the State of Pennsylvania, May 10th, 1883:

It is in the experience of every surgeon to be occasionally obliged, in the absence of ordinary means and appliances, to devise resources available at the moment. Such occasions bring the practical character of the surgeon to the test, and on his readiness for the emergency may depend the relief of suffering or the averting of a fatal termination. His reputation, too, may, at such times, stand in the balance of good or ill report, to be turned happily in his favor or gravely against him.

The exigencies of active surgical practice have frequently obliged me to rely on hastily-devised resources, and I trust that the record of some of them which I recall may possibly be of benefit to the profession and a relief to human suffering.

The necessity for *evacuating an over-distended bladder* is liable to become immediately urgent on occasions when a catheter is not quickly attainable. It is remarkable how often this condition is overlooked by practitioners, until it becomes one of suffering and danger, demanding instant relief. The continued dribbling that often occurs from an almost bursting bladder may mislead or blind one to the grave danger. The absence of a catheter on one such pressing occasion led me to contrive a ready means of evacuating the urine. The recourse was to a piece of iron bell wire, bent double on itself, and the blunt doubled end passed readily through the urethral tract to the bladder. The distention of the urethra by the doubled wire allowed the urine to freely pass between the wires.

A female catheter may be extemporized from a short piece of rye straw, the end of which is to be closely wrapped for a short distance with thread; or the end of the straw may have its sharpness removed by dipping into melted sealing wax. The stem of the ordinary clay tobacco pipe is also efficient for the purpose. Such crude substitutes, when oiled, are readily introduced.

The operation of venesection would probably be more frequently resorted to when needed, if a proper lancet, in perfect order, were at hand; but the critical time for relief of an actively congested or inflamed lung or brain is sometimes allowed to pass, for want of a ready and certain method of opening a vein. I once, on a pressing occasion, bled a patient at the bend of the elbow, with perfect ease and precision, with but a blunt-pointed and dull pocket knife, by resorting to a simple, convenient expedient. Having put on the usual constricting bandage to distend the veins, I first transfixed the most prominent vein with a fine needle. Thus held securely, it was very easy, with even the dull knife, to cut a valvular incision into the vein, and the blood flowed freely.

For the arrest of nasal hemorrhage I know of no device so good as one that may be readily extemporized with a strong piece of cord and some small pieces of sponge. The cord is tied securely to a piece of sponge cut rounded, and just large enough to be forced backwards through the nostril. Then a number of similar pieces of sponge, with a hole through the centre of each, are threaded successively on the cord. The sponge on the end of the cord is then pushed, with a probe or dressing forceps, through the nostril, quite back to the faucial orifice; and the rest of the threaded pieces of sponge are slid back, one at a time, until the nares is tightly filled. When the patient becomes secure against a repetition of hemorrhage the pluggling is readily removed, one piece of sponge being withdrawn at a time, with the dressing forceps. The posterior nares may also be easily plugged by introducing either a slender gum bougie or a piece of thick catgut string, with a cord attached, through the nares, catching one end of it in the fauces with forceps, and drawing it forward through the mouth. To the cord which follows, a piece of sponge or pledget of lint is tied, to be drawn up into the posterior nares.

A method of making unirritating and painless pressure within the nares, in cases of obstinate epistaxis, is by a piece of the intestine of chicken or other small animal, about twelve inches long, partially filled with either air or water. One end of the intestine is, while empty and collapsed, pushed backwards through the nares; when thus lodged the air or water in the other end is forced, by compression with the hand from the pendulous portion, into the part lodged in the nares. Strong, equable compression can thus be made, rendering hemorrhage impossible.

In a case of hemorrhage from the intercostal artery, from homicidal stabbing, I arrested the flow immediately by making pressure within the pleural cavity, directly on the vessel, by introducing into the wound the handle of a door-key. The key was then turned transversely, so as to make direct pressure, and maintained in that position for some hours, until there was no more tendency to hemorrhage. The same mechanical action might be effected by the similar use of the handle of an ordinary gimlet.

As a very efficient substitute for Esmarch's elastic bandage, I suggested some years ago, in an article in the *Philadelphia Medical Times*, the use of a bandage made from ordinary flannel, cut bias, so as to increase its elasticity. Such an elastic bandage, from a material almost everywhere at hand, is, I know from experience, perfectly effective.

The hemostatic action of hot water does not seem to be sufficiently known and appreciated among practitioners. It is so effective, and can be so readily applied, that it may well displace from practice all other hemostatics. Water at a temperature not beyond tolerance of the immersion of the hand in it, which is a temperature of one hundred and fifteen to one hundred and twenty degrees, is ordinarily all that is necessary; but in some cases not amenable to treatment by ligature, a temperature above 160° F., the coagulating point of albumen, may be necessary.

The absence of a tenaculum may be well replaced by a small fish-hook secured to a penholder.

For dislodging a foreign body in the œsophagus by forcing it downward, an ordinary carriage or riding whip, knotted far enough from the end to insure the proper degree of flexibility, may be an efficient expedient in an emergency.

Materials for splints for the temporary dressing of fractures can be at almost all times extemporized from the materials of wooden boxes and binders' boards. To dress fracture of the forearm and of the leg, in a case required to be removed to a distance from the scene of the accident, I once improvised an efficient dressing by breaking into strips some ordinary palm-leaf fans, which were at hand, and bound them on the limbs. I commend the material for its merits of being elastic and conformable to the shape of the limb. Good temporary dressings can also be made from common straw, cut to proper length and bound in layers on the limb.

For a readily made fixed dressing, a plan I have resorted to is with ordinary sand-paper as the material. The sand-paper is dipped into warm water, to soften the paper and glue, and it is then applied and retained with a bandage. The glue of the sand-paper soon gives rigidity; body and firmness are produced by the sand and paper. Strong fixed dressing, it should be remembered, can be readily prepared and with the familiar domestic commodities of starch, or with the combination of eggs and flour.

In removing a patient with a fractured thigh or leg, the uninjured limb can be made to temporarily act as a splint and take care of the injured one, by simply bandaging the limbs together. It should be borne in mind that many fractures of the long bones can be well treated without any kind of splints. Fractures of the femur are now generally treated with splints. After coaptation is effected, simple entension, by means of weights, is the only essential. Fractures of the clavicle are, I am convinced, from practical experience and much attention to the subject, the most effectively treated by keeping the patient in the supine position of the body, with the head alone slightly elevated, to relax the sternomastoid muscle, one of the factors of displacements of the fragments. If this position, on a level mattress, is maintained for only a week or ten days, the tendency to displacements is so overcome that a mere sling for support of the arm and shoulder, or other simple dressing, is all that is necessary.

The simple postural method of treatment, without splints, is applicable to most fractures in the the vicinity of joints. In fractures of the upper end of the humerus, splints are usually of no real practical advantage, and the injury can be well treated by position of the arm, and by support against the thorax, maintained by adhesive strips, or bandages, occasionally aided by an axillary pad.

The usual fracture of the lower end of the radius, transverse in direction and produced by a fall on the extended palm of the hand, if properly reduced by longitudinal traction and forced flexion of the wrist and hand, has rarely a tendency to displacement if the wrist and hand are maintained in a state of moderate flexion without the use of any splint.

The ordinary splint, applied on the outside of a fractured jaw, is mechanically inefficient for the object, and has no advantage over an ordinary bandage, or handkerchief, applied to keep the part at rest.

Many surgical instruments are made after traditionally complicated forms. Scalpels, bistouries, and needles should not be crooked. I know of no use for curved knives, and the occasions for the use of curved needles may be limited to a few plastic procedures in cavities. The ordinary surgical needle, with its absurd and inconvenient curve, I long ago discarded in favor of the more efficient, simple and cheap glover's needles. A good surgical needle can be readily made from an ordinary sewing needle, broken off above its point and grounds to such an oblique point as is given to the hollow needle of the hypodermic syringe.

A common gimlet is an efficient instrument for opening the mastoid cells, in cases of abscess, when there is grave threatening of cerebral complication, demanding prompt action.

The patient use of a carpenter's rasp may safely substitute the trephine, in cases of fractured skull,

by cutting away an angle or edge of bone at the point of fracture, and allowing an elevator, such as a small screw-driver, to be inserted beneath a depressed fragment.

In regard to the traditional forms given to instruments, I have inquired of different instrument makers why the sharp, triangular point is made on the ordinary silver probe, but it remains unexplained. I have never seen any surgeon use this curious bayonet-point of a probe, and know of no possible use for it.

The facility with which rectal injection can be performed with large quantities of fluids, by hydrostatic pressure, renders not essential the use of a syringe, if a piece of India-rubber tubing long enough can be obtained. The lower bowels may be distended, in cases of intussusception, by injecting water and carbonic acid gas, forced from the ordinary mineral water bottle or syphon, fitted for the rectal tube.

In cases of violent inflammation and traumatic injuries of the eye, needing immediate use of a mydriatic, the universally present stramonium may well substitute belladonna or atropia.

For antiseptic use many readily produced substances may well replace carbolic acid. None is so cheap and efficient as that most neglected preventer of putrefaction, sulphurous acid, made simply by exposing water to the fumes of burning sulphur in a close chamber. The antiseptic action of a saturated watery solution of turpentine has also the advantage of convenience of procurement and cheapness. For this purpose turpentine should be kept continually in water and exposed to warmth, and frequently agitated. Diluted alcohol has merits as an antiseptic which have not received proper attention.

Recent investigations have proved that the bichloride of mercury is the most powerful of all germicides, and that it can be used effectively in unirritating dilutions of one part to two thousand or more of water. These readily obtainable substances prevent the decomposition of animal matters, and, without disputing over the germinal, chemical or other theories of their action, all surgeons must admit that putrefaction is the most common factor in preventing the healing of wounds, and that it should be avoided.—*Polyclinic.*

THE CANADA MEDICAL RECORD,

A Monthly Journal of Medicine and Surgery.

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SUBSCRIPTION TWO DOLLARS PER ANNUM.

All communications and Exchanges must be addressed to the Editors, Drawer 356, Post Office, Montreal.

MONTREAL, SEPTEMBER, 1883.

MILITIA SURGEONS..

The following recommendations presented by Dr. Thorburn to the Canada Medical Association, at its recent meeting, received the approval of the meeting:

1. The organization of a militia medical depar t-ment, with a chief medical officer at headquarters.

2. That the senior medical officer in each military district be appointed principal medical officer.

3. That substantive rank be granted to all military medical officers.

4. That the medical department shall be supplied with all necessary equipment for the use of the force when required.

5. That it be further submitted to the honorable, the Minister of Militia, the advisability of changing the titles and designations of Canadian medical officers, so that they will correspond with those held by the medical officers of the British service; thus, surgeon instead of assistant surgeon, surgeon-major instead of surgeon, brigade surgeon instead of surgeon-major, deputy surgeon-general, etc.

6. That the scale of pay and allowances of the militia medical department be assimilated to that of corresponding ranks of the British medical department.

McGILL FACULTY OF MEDICINE.

This Faculty is to be congratulated on the result of the appeal which their new Dean made a year ago to the public for an endowment fund. The Hon. Donald A. Smith has given $50,000, the fund to bear the name of "The Leanchoil Endowment"; a further sum of $50,000 has been collected, and will be known as "The Campbell Memorial Fund."

PERSONAL.

Dr. Hurlburt has removed to Mitchell, Ont.

Prof. Pancoast, of Philadelphia, was in town for a few days.

J. M. Dunsmore, M.D. (McGill, '70), has removed from Mitchell to Philadelphia.

Ovide Martel, M.D. (McGill, '83), has begun practice in St. Urbain street, Montreal.

J. S. Smiley, M.D. (McGill, '80), has removed from Rawdon, Q., to Portsmouth, Iowa.

Dr. A. A. Browne of Montreal, has returned from a tour of Great Britain and Germany.

Dr. H. P. Wright, of Ottawa, has returned from Europe.

Arthur Storrs, M.D. (McGill, '76), is practicing at Wexborough, York, Eng.

R. H. Klock, M.D. (McGill, '82), of Aylmer, Q., has gone to Port Arthur to join T. J. S. Smellie, M.D. (McGill, '77).

Sir William MacCormac, surgeon to St. Thomas, Hospital, London, was in Montreal early in September.

Thomas Cook, for the last thirty years janitor to the McGill Medical Faculty, owing to increasing infirmities, has been pensioned by the Faculty.

Dr. Walsh, of Washington, editor of the *American Retrospect*, spent a couple of days in Montreal lately. While here he visited Dr. Bessy's vaccine establishment.

Professor A. P. Simpson, of Glasgow University, was in Montreal for several days lately.

Dr. James Stewart, the new Professor of Materia Medica and Therapeutics in McGill College, returned from Vienna on the 3rd. Sept.

Dr. Hurd, Superintendent of the Asylum at Pontiac, Mich., visited the Longue Pointe Asylum lately. The Canada *Medical and Surgical Journal* says: He was disgusted—as are all intelligent physicians who know anything of it—with the way in which the institution is conducted.

Dr. Graham, of Toronto, spent a few days in Montreal on his return from a visit to Tracadie, N.B., where he has made a most exhaustive study of the Lepers at the Lazaretto.

Dr. James McGregor Stevenson, (M.D., McGill, 1857), has removed from Bryanston, Ont., to London, Ont., on the 14th of September. Previous to his departure from Bryanston, about fifty of Dr. Stevenson's friends met at his residence and presented him and his lady with an address (beautifully engrossed and framed), expressing deep regret at their contemplated removal to the city of London, and requested their acceptance of a very handsome silver tea set, as a small token of the high esteem in which they are held. The Doctor in feeling terms replied, thanking them for their valuable present; for the confidence which they had ever reposed in him, and for the many acts of kindness which he and his family had received at their hands. After remarks of the most friendly kind, and expressions of deep regret at the loss which they were about to sustain in the departure of Dr. Stevenson, the company sat down to a bounteous supper provided by the visitors, and enjoyed themselves during the evening in a mannner not soon to be forgotten.

Our report of the meeting of the Canada Medical Association is partly taken from the Philadelphia *Medical Times*.

OBITUARY.

Dr. Edward Laberge of St. Philomene, Chateauguay County, P.Q., died on the 29th of August. He was a graduate of McGill College Faculty of Medicine 1856, and an earnest, painstaking physician. He was a member of the Provincial Legislature and an advanced Liberal; he was also a Governor of the College of Physicians and Surgeons of this Province.

REVIEWS.

The Pathology and Treatment of the Diseases of the Ovaries. By Lawson Tait, F.R.C.S., Ed. & Eng. Fourth Edition, rewritten and greatly enlarged. New York: Wm. Wood & Co., 1883, pp. 351.

Few modern surgeons have been more roundly abused than Lawson Tait. His powerful advocacy of abdominal section for the relief of salpingitis, his open contempt for Lister's spray, his stubborn opposition to vaccination and vivisection, have raised up hosts of enemies and alienated many friends. Though his views are too often extreme and even eccentric, his tone sometimes harsh and uncompromising, his claims and statements high-colored and injudicious, yet his originality, skill and success have won for him a foremost place among European surgeons. His results since 1878 have been so remarkable that he has now no fear of the peritoneum, and formulates the following surgical law:—

"In every case of disease in the abdomen or pelvis in which the health is destroyed or life threatened, and in which the condition is not evidently due to malignant disease, an exploration of the cavity should be made."

We heartily commend this book as practical and suggestive, and well worthy a careful perusal.

A Treatise on Therapeutics, comprising Materia Medica and Toxicology, with especial reference to the application of the Physiological Action of Drugs to Clinical Medicine. By H. C. Wood, M.D. Fifth edition, revised and enlarged. Philadelphia: J. B. Lippincott & Co., 1883, pp. 740.

The fact that the fourth edition of this book was exhausted in six months is the best possible proof of its popularity and value. We can only reiterate our favorable opinion, recommending it strongly to those who would rise above empiricism and have a reason for the faith that is in them.

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TREATMENT OF URETHRAL STRICTURE.

By CASEY A. WOOD, C.M., M.D.,

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(Read before the Medico-Chirurgical Society, 12th October, 1883.)

Several years ago I was called to see a male patient, aged 27, suffering from severe pain in his glans penis and about the hypogastrium. He was micturating every hour, and passing urine heavily loaded with mucus and some pus, showing that he had at least subacute, if not acute, cystitis. Being a very intelligent man, and like most patients of the kind who suffer long from disease, he had made a study of his case, and I was able, without difficulty, to get a full history of his previous troubles.

Nearly three years before he had had an attack of gonorrhœa, which he allowed to run into gleet, which gleety discharge, he says, has persisted ever since the acute attacks, sometimes almost disappearing, at other times increasing in quantity, losing its serous character, and becoming quite white from admixture with pus. After having had gleet for some time (several months) he noticed that he had difficulty in passing his urine freely, and that the stream was not only diminished in size but was twisted and split into two portions. This alarmed him, so that he applied for medical advice.

The medical man whom he consulted told him, on examination by catheterization, that he had urethral stricture about the middle of the spongy portion of the canal, which would admit only a No. 5 instrument. He then went under treatment by gradual dilatation and the symptoms were considerably ameliorated. Having learned to pass gum elastic bougies he gave up medical attendance, and went to work to treat himself.

However, he found that the active business he was engaged in at the time, and the consequent amount of walking he had to do, interfered very materially with his recovery, so he left the city he was then living in, and went to reside in the country, when complete rest, proper diet, and regular habits for a couple of months, almost restored him to health, for, as you may imagine, the necessity of using bougies continually, while in active employment, had considerably reduced him in health and spirits. He says at that time he was using a No. 7 catheter, although, by employing a little force, he could introduce No. 8. As time wore on he found that he was obliged to pass a catheter to draw off his urine, and that he could find this habit (for he thinks that it at last degenerated into a habit) was growing upon him, and that urinating without its use was always attended by some straining and pain. He shortly afterwards left the country to live in a small town in Ontario where he came across a doctor who persuaded him to a somewhat original treatment for his trouble, viz.:

the injection into the urethra of a very strong solution of nitrate of silver. The effect of such an heroic remedy may well be anticipated. The most violent inflammation was induced, and he was laid up in bed for more than a week.

I must agree with the patient in his idea that this rough method only aggravated the disease. During this time you must imagine him not only treating himself with various nostrums but as also using the catheter, as much for the purpose of voiding his urine as for dilating the stricture, Being of a roving, energetic disposition his trouble. since it now and then laid him up for days at a time, preyed upon his mind and spirits to such a degree that he at last decided to put himself under the care of a surgeon until he became completely cured. Had he been wise enough to have done this from the beginning there can be no doubt but that he would have been saved all his subsequent trouble.

Falling into the hands of a surgeon living some fifty miles from Montreal he was advised by him to have an operation performed for the relief of the stricture. Coming to Montreal he entered one of our city hospitals, where the stricture was forcibly dilated in the usual way, a No. 10 catheter was passed into the bladder and retained for some time after the operation.

Catheterization was kept up for quite a while after the operation, and the patient left the Hospital inside of six weeks seemingly improved. He was ordered to use injections of zinc. sulphate (5 grs. to ℥ i of water) and occasionally to pass a large bougie, and was further informed that the necessity for using bougies would soon be done away with,and the urethra return to its normal condition. The patient then took a situation in this city that enabled him to keep quiet and attend to himself. Matters progressed very favorably for about two months afterwards, when he found that he could not pass the catheter with the same impunity that he formerly did; that the stream was getting gradually and perceptibly smaller, that he could not enter the bladder readily with the larger-sized catheter, and consequently was obliged to use smaller sizes. The discharge, for some time quiescent, now began to shew itself, and he was horrified to see that the stricture, instead of remaining open, as he expected it would, was beginning to contract and cut off the ready exit of urine; some pain was also noticed in urinating. Very unwisely, he began self-treatment again, but matters went on from bad to worse, and in a couple of weeks he found that every time he catheterized himself,which was now at least twice a day, that the penis became hard, rigid and congested, and he says he could feel the corpus spongiosum all the way along harden up like whipcord. The stricture seemed to remain in *statu quo* for a while, but every time he had to urinate (now about six times in the 24 hours) the whole urethra became rigid and congested, and when he passed a catheter it seemed to be grasped by the stricture, causing him considerable uneasiness. There now appeared pain in the glans penis, some hypogastric tenderness and a dragging sensation in the testicles, all increased on urinating. He had to use the catheter 3 times daily to draw off urine, since neglect to do so caused much straining and pain.

Noticed for some time how turbid his urine was, and how soon it decomposed. At last the patient decided to have a doctor and, disgusted with those of an allopathic nature decided to make trial of a disciple of Hahnemann and Jahr. This gentleman undertook to treat him on what he facetiously termed the "antiphlogistic" plan: gave him some white powders, kept him in bed, but allowed him to treat himself as far as the use of catheters went. Patient, however, got steadily worse, and I was finally asked to see him. I found him in the following state: slightly feverish, pulse 100, temperature 100, pain and tenderness in hypogastric region and some pain in the penis. In urinating, which he does every hour, pain shoots down into perineum, and there is considerable tenesmus. Bladder always feels as if some urine were left in it. Pain also in testes, which are retracted. Examined his urine at once, found it neutral to test paper, laden with mucus, pus and some blood corpuscles. The whole penis seems congested and hardened. Carefully introducing a No. 5 catheter feel it grasped in the canal in what I think two distinct places, one towards the upper fourth of the spongy portion and the other much further back near the neck of the bladder. The spasmodic contraction of the bladder, due to the irritation set up by the catheter, drives the urine past the sides of the instrument, and blood follows the abstraction of the instrument, which gives the patient some relief. Ordered him to begin at once the following mixture:

℞. Tinct. hyoscyami ℥ i
Spt. ether nitrosi ℥ ss
Potass bicarb. ʒ iii.
Aquæ Camphor ℥ ij.

Sig: a dessertspoonful three times a day in a tumblerful of barley-water.

He is to be put on milk diet with porridge, rice and break and milk. No grog, no tobacco. To use warm laudanum fomentations three times a day, oftener if the pain becomes severe, when also he is to have a draught containing mix each of tr. opii. and tr. belladon. Forbade the use of catheter more than once a day for three days, and then to stop it altogether. To take a warm hip bath before retiring. This was about the 16th October.

17th—Passed a very fair night, desire for frequent micturition being about the same. Hot fomentations and opium lessen the pain and relieve the spasmodic contraction of the urethra. Ordered a warm hip bath when pain gets severe.

18th—Patient thinks he will try and dispenes with the catheter altogether, as he finds he gets along so well without it. All the symptoms are improved: less pain; urinates about once every hour and a-half during the day, but, as he sleeps better at night, can go two, and sometimes three, hours without awakening. His bowels are very constipated, so ordered a warm water and gruel enema.

19th—Called in great hurry to see patient. Messenger informs me he cannot pass his urine. Went at once to find him relieved by the use of a hot bath and laudanum fomentations. The small stream he passed at first does not seem to diminish; patient imagines it is larger; not improbable, since the congestion and spasms are much decreased. Urine still loaded with mucus and some pus.

20th—Patient improving slowly: feels much better to-day, and the bladder symptoms much improved. Stream is certainly getting larger, urine comes always more freely, and the spasmodic congestion less marked; spongy body in perineum less hard and unyielding.

21st—Great trouble with patient's bowels. The constipating effects of the opium are not at all pleasant. Ordered to take another warm gruel enema, and to omit the laudanum; other medicine as before.

24th—For past two days patient is steadily improving, appetite better, spirits rise, and he thinks he is going to jump at once into perfect health.

25th.—Called early this evening by his servant to see Mr.——Found him suffering intense pain from retained urine. Marked tenesmus with no results. He tells me that, relying upon his daily improvement, he had walked around the house rather much during the p. m., and neglected to urinate. When he did make the attempt he found urine would not pass, and on re-attempting to use a catheter only succeeded in making matters worse. Got relief when he had been given a hot hip bath and an enema of ℥ ss. of tinct. opii. The penis was congested and swollen, and the testes again retracted. There seems to be a state of general spasm, with congestion in all the parts about the bladder.

29th. I think that by to-day patient has gained his old vantage-ground. Says his imprudence has been a lesson he won't forget, and promises not to transgress again.

Nov. 1st—Patient so much improved that I have ordered him to leave off the laudanum fomentations; it is now two weeks since he used a catheter, and yet he finds himself better for not using it, that is, he can urinate more freely, requiring to do so only every three hours, and the straining and painful micturition are vastly better.

Nov. 6th—Have seen patient several times since the first, and am glad to find him getting along so nicely. The acute cystitis has almost gone—no pain in hypogastrium or penis; urine contains but little pus and not much mucus. He sleeps well at night, and has gained flesh rapidly, and in every way feels, as he expresses it, "a new man." I allow him to take short walks when the weather is fine, and tell him he may eat meat at dinner time and eggs for breakfast; no vinegar, and as little sugar and sweet stuffs as possible.

Nov. 8th.—Examined patient's urine to-day: re-action faintly acid; very little mucous deposit, only a few globules of pus; color clear and healthy.

Passed a No. 6 bougie with some trouble; find two well-marked strictures; one, the smaller of the two, is in the centre (or about it) of the spongy segment, and the other, considerably larger, is situated in the membraneous portion. The first stricture can be felt, over the bougie, to be about the thickness of a No. 1. English bougie; the second one, from the resistance offered to the bougie, is, I should judge, considerably larger possibly three times the size. The question now arises, since the patient has recovered entirely from the acute cystitis and the urethral fever, leaving only the strictures to deal with, what method shall be adopted in treating them? Whatever opin on

I may have on the subject is over-ruled by the patient's fi m refusal to be operated upon; happily I agree with him *in toto* as to the proper course to pursue. He is to take every second night a tepid bath, and after being rubbed down well with a rough towel to retire early to bed, to be regular in his habits, careful in diet, and abstain from excitement of every kind. I am to begin treatment by gradual dilatation at once, beginning with a No. 6 gum elastic bougie, which I introduced to-day, and left in for five minutes. To leave off his other mixture, and take instead of it, three times a day, twenty drops each of liq. potassæ and tinct. hyoscyami,* in a tumbler of barley-water, to allay irritation caused by the introduction of the bougie. These latter are to be anointed with a mixture of five grs. of muriate of morphia in benzoated lard.

Nov. 10th—Patient is remarkably well; has walked down town and done considerable business, with no bad results unless a little fatigue. Introduced No. 7 gum elastic bougie, remaining there five minutes. No trouble in passing first stricture, but some difficulty in getting through second.

Nov. 12th—Patient passed very fair stream of urine to-day, which deposits little or no sediment. The bougies do not cause spasm or congestion. Passed No. 7 again to-day, with greater ease. Has had a slight discharge of pus.

Nov. 14th—Passed No. 7 again to-day.

Nov. 16th—Managed to get No. 8 through first stricture to-day, but some trouble in passing the second.

Nov. 18th—Passed bougie No. 8. Patient still continues to improve, and goes about the city with the greatest ease. He says the old swelling in his perineum has about disappeared, and his testes are again in their proper place.

Nov. 21st—No 8. bougie goes through even second stricture with but little trouble. Some discharge of pus to-day, and some uneasiness in the stricture when urinating.

Nov. 25th—Tried bougie No. 9, which has passed the second stricture with some resistance. The first stricture is readily dilatable, and gives no trouble whatever; it is moreover, from its position, easily under control. No. 9 bougie was introduced on the 27th, and because it caused no irritation was again passed on the 30th.

In May of the following year my patient was able to pass himself No. 12 English bougie, and one year afterwards and until to-day has dispensed with such artificial aids to micturition, nor has he been troubled with any of his old urinary difficulties, and as his general health is in every way good, and he has passed a searching life insurance examination, I regard him as cured.

My experience of the treatment of stricture of the male urethra, slight as it has been, inclines me to the advocacy of rupturing or incising the obstruction in all cases not readily and shortly overcome by the plan of gradual dilatation for, if the evidence of such men as Perrève, Sir Henry Thompson, Holt, and other surgeons, be worth anything, the final results of the immediate plan are, on the whole, quite equal to those obtained by the tedious method of gradually restoring the normal calibre of the canal

I must confess, however, that I have only come to think so after six years' strict observance of the rule so confidently laid down by certain authorities on the subject, that dilatation is advisable in most cases where it is possible to introduce a bougie; that even where recourse is had to rupture or urethrotomy still dilatation is necessary to stretch the recent fibrinous deposits (the result of the operation) or to cause absorption of the fibro-plastic material still left after the use of the divulsor or urethrotome.

Moreover, respecting the dangers of this apparently rough usage of so delicate and susceptible a canal as the urethra, I do not see that gradual dilatation has as much to commend it on this score as might at first appear, for I have myself seen patients attacked by urethral fever, cystitis, orchitis, perineal abscess, and by obstinate prostatic gleet during the most careful treatment of ordinary cases of stricture by the gradual plan.

The case I have related seemed to me to call for the milder and more careful method; and in acting as I did I simply followed the hint which the patient himself furnished by his previous experience. In concluding, I venture to suggest that the failure to cure my patient by the use of the divulsing instrument may have been due to the insufficient use of it. It is in the manner of using the divulsor that there is such great divergence of opinion.

* Note. This prescription was given before the profession had the benefit of experiments upon the effect of caustic alkalies on the mydriatic alkaloids. It may, however, be doubted whether, when diluted with a sufficiency of water, a mixture of liq. potassæ and tincture of hyosyamic is rendered inert in a short time.

Sir Henry Thompson declared its object to be that of overstretching the morbid tissues as much, and to rupture them as little, as possible, in order to destroy, or, at all events, to greatly impair, the natural tendency of the stricture to contract.

Other surgeons, like Packard, with an opposite theory, contend that it is only by actual rupture of the diseased tissue that good results can be had, and that if the stricture be simply stretched there is no reason why it should not in time return to its first size. Bearing in mind the fate that commonly awaits mere theorizing, I would ask what is the practical experience of members of the Society on this question?

Society Proceedings.

MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

Stated Meeting, July 6th, 1883.

THE PRESIDENT, DR. KENNEDY, IN THE CHAIR.

Dr. Trenholme exhibited two pairs of *Ovaries and Fallopian Tubes* removed by him from patients in St. Catharines. All the ovaries were diseased, being several times larger than normal, the hypertrophy and induration due to dense fibroid tissue. The tubes were intensely congested at the time of removal. The indications for the operation in each case were intense pelvic suffering, in one case dysmenorrhœa with menorrhagia, and in both oöphoralgia with all their accompanying general nervous derangement. In both cases the operation was made with antiseptic precaution, but without spray, and both made a good recovery, though in one case from fifteen years of suffering, convalescence was slow. Dr. Trenholme stated that the case, operated on some three months ago, was doing well, being free from all those pelvic pains for which the operation was made, and able to perform household duties, though previously an invalid for many years.

Dr. Gardner also shewed a pair of ovaries which he had removed eight days before. The patient, 38 years of age, had suffered from dysmenorrhœa for several years. She consulted Dr. Thomas, of New York, some months ago, and he prescribed for her anteflexion, replacement twice a week, hot douche twice a day, galvanism over ovaries, and arsenic internally. This treatment was carried out by Dr. Gardner for some time; he also tried galvanic and other stem pessaries, and dilated with tents with but little or no good results. Patient was an invalid going from bed to sofa, and on motion or pressure on abdomen suffered from paroxysmal pains in iliac region. She was very anxious to be operated on. Dr. Gardner performed the operation under the spray, applying a double ligature, and removing both ovaries and fallopian tubes. Patient recovered completely without a bad symptom; highest temperature, 100½°. To-day there was a slight thrombus of the vein of left leg. Calf, behind knee and thigh, very tender. The ovaries were both diseased, one having a cyst the size of a pigeon's egg, the other indurated masses in its tissue; tubes somewhat dilated.

Dr. GARDNER mentioned that in the case brought before the society at last meeting, when he had operated five weeks ago, his patient had the usual metrostaxis for a few days, but has lost nothing since. The uterus has undergone involution to half its previous volume. Her complexion, which was bronzed, is much clearer. Has a purulent catarrh of the bladder and lithuria; otherwise is somewhat better.

Dr. OSLER said that he had often met, post mortem, with ovaries and tubes as badly diseased, yet without history of pain during menstruation.

Dr. GARDNER said why sometimes painful, is probably that, when diseased, it aggravates an innate vice. Condition of celibacy producing a want (only satisfied by a happy married life) may be one factor in production of this trouble. He believed the last case of his would have been benefited by Dr. Weir Mitchell's treatment, but the means were not available for sending her to Philadelphia, and we were not yet prepared to carry out this treatment fully in Montreal.

Dr. Gardner next exhibited a *Mucous Fibroid*, the size of a turkey's egg, removed by him from a woman, aged 44 years, the mother of several children, the last four and a half years ago, and had no health since. Greatly weakened by profuse menstruation, was blanched, and suffered from nausea at each period. When seen by Dr. Gardner, uterus was so enlarged as to half fill the pelvis. Dilated with tents, felt tumor with finger, bu could not well make out a pedicle. In waiting for the next period it was found that the dilating had delayed it. Instead of 21 days it was 40, and only lasted three days, and there was less nausea. Dilated again, and under ether removed it without much difficulty by means of Thomas'

serrated scoop, was attached to the left lateral wall and fundus. Daily irrigation of uterus with a double tube was kept up for some time, a little iodoform was also put into the uterus each time. Patient recovered completely; had no pain and no offensive odor.

Contagious Syphilitic Lesions of the Os and Cervix Uteri.—Dr. Bell read a paper on this subject, based on the reports of three cases of what had been diagnosed as simple ulceration or erosion of the os uteri in young prostitutes, in whom no other possible source of syphilitic inoculation could be found, but to whom several cases of syphilis were distinctly traceable. Three cases were traced to the first patient, two to the second, and two to the third. In the first case, the disease was communicated shortly before the patient was admitted to hospital. In the second case, it was communicated within fifteen days after the patient had left the hospital; and in the third case, a considerable period of time had elapsed. Brief reports of these cases were given, and the writer expressed his opinion that in the first two cases the sores were uterine chancres, though not diagnosed as such at the time; while in the third case, the report of which was meagre and imperfect, he thought it probable that syphilis had been engrafted upon the simple erosion of the os subsequent to her residence in the hospital. The first patient passed from observation completely on leaving the hospital; the second was under partial observation for nearly a year without the appearance of any definite secondary lesion; and the third developed secondary symptoms about three months after leaving hospital. The writer excepted the cases contracted from the third patient from the discussion, as a period of eight months must have elapsed from the time she was under observation before their inoculation could have occurred. He also drew attention, in the other five cases (which were considered reliable) to the mild character of the disease throughout, and especially to the uncertain and atypical characters of the primary sore, and expressed the opinion that, owing to the great frequency of the occurrence of simple erosions of the os uteri, many infecting syphilitic sores were probably overlooked, and that in this way might be explained many of the obscure cases of syphilis in which no history could be obtained of primary sore.

Dr. RODDICK said he saw one of the parties who contracted syphilis from Dr. Bell's third case. He (Dr. R.) believed this one, as well as the other two, must have had mucous patches of the os, which must have been there for a long time, preceded by chancres of the vulva. Dr. Roddick's patient had a doubtful chancre, not hard; came on fourteen days after connection. He put him on constitutional treatment at once, and thought this should be done in every case where one is pretty sure chancre exists. Don't wait for "secondaries;" give Iodide of Mercury or Hyd. with Creta. His patient is now having slight secondary symptoms. A friend of his contracting from the same woman, and keeping it a secret, is having a sharp attack of secondaries.

Dr. GARDNER said that out of three or four thousand uterine examinations only saw one undoubted case of chancre of the os, and there were also ulcers on the vulva.

Dr. SHEPHERD thought syphilis was often implanted on an erosion of the os, and overlooked; believed in waiting for secondary symptoms before treating, as treatment sometimes delays the skin eruptions. Had had a case of squamous syphilide without any sore whatever, which disappeared under constitutional treatment.

Dr. HINGSTON said most surgeons used mercury for syphilis. Now, he never uses it; his treatment being to support strength with good diet, cleanliness, gives Iodide of Potassium, Nitric and Hydrochloric Acids, and some bitter tonic. He said the Indian Surgeons found they had as good success without, as with, mercury.

Dr. RODDICK said he used to wait for secondary symptoms, but experience had taught him to treat undoubted cases at once. Has never yet seen or known secondary lesions delayed; always come on n two months, are always modified, never saw b ad lesions if so treated; found they got over quickly, and had slight, or never any, tertiary.

Dr. GARDNER said an argument for waiting for secondaries would be where there was a question of marriage.

Dr. F. W. CAMPBELL spoke against the press publishing "fearful operations" together with name of operators. He read from a recent number of the *Star* an account of an operation which had been performed at one of our city hospitals, showing technical terms used correctly, indicating that some medical man must have furnished the item.

Several members suggested remedies for this state of things, and from them it was traced to

medical students, who were also reporters. The Council was asked to draw up a petition to be sent to the editors of the various papers, asking them to refrain in future from publishing such articles.

September 21st, 1883.

Dr. TRENHOLME exhibited the ovaries and tubes which he had removed three weeks ago from a patient twenty-four years of age. She had suffered from dysmenorrhœa, with pain continuing after the period, making life miserable. The ovaries were removed by abdominal section under the spray. Both were hypertrophied and tubes congested, there was also congestion of the uterus. Patient made a perfect recovery.

Dr. T. also shewed an ovarian tumor removed by him thirteen days ago. Patient was twenty-four years of age. Was sent to him from the country. Had suffered for four years, distress gradually increasing, but tumor had been only recently discovered. Dr. T. found a large tumor to the left of median line, and diagnosed cyst of left ovary. On opening the abdominal cavity and examining, was found to spring from the right ovary, and weighed twelve pounds. Patient did well; highest temperature was on 8th day, 100.2, from a slight bilious attack. Dr. Young gave the following description:

No. 1.—Right ovary expanded by pressure, yet ardently healthy, as proved by the normal condition of the ova, which are shown as coming to maturity. There are three cysts, the covering of each being continuous with the covering of the ovary; they are all extra-ovarian, *i.e.*, the tissues of the ovary are not involved in their development, but the capsule of the ovary constitutes the covering of the cyst. Each cyst contained serous fluid, and on the wall nearest the ovary a small *sac* containing a grumous yellow mass was found, suggesting the possibility of the retention of the *ova* in the covering of the ovary as giving rise to inflammatory action in the middle cyst. Exactly over this yellow pigmentary deposit was a *warty* fibrous excrescence, which also favors the idea of irritation from non-escaped ova being the cause of the cystic development. The left ovary is much enlarged; covering dense, otherwise healthy.

Dr. HENRY HOWARD wanted to know if Dr. Trenholme only performed "Tait's" operation as a *dernier ressort*, that is, after trying other means for relieving the symptoms, as he thought there might be a danger now-a-days of resorting to spaying without a fair trial of less heroic treatment.

Dr. FENWICK read a paper on Ligature of the Axillary Artery in a case of traumatic injury to that vessel after fracture of the surgical neck of the humerus. The following are the principal points in the case :—

Eliza C. B., aged 41, a spare, delicate-looking woman, was admitted into the Montreal General Hospital, on May 30th, 1883. While walking in the street a piece of heavy timber fell from a building; it broke in two, and the upper half struck her on the shoulder, breaking the humerus at its upper third, about two inches below the joint; the upper fragment was drawn forcibly inwards and lacerated the brachial artery at or about the point of the commencement of that vessel. On examination the shoulder was greatly swollen, the axillary pit brawny, and filled with what appeared to be blood; there was considerable tumefaction beneath the pectoral muscle, extending as high as the clavicle. The entire upper part of the front of the chest and axilla was tense and mottled; there was absence of pulsation below. On examination with the stethoscope the pulsation could be traced down to a point about an inch below the fold of the axilla, and at this point there existed a circular abraded surface about the size of a shilling. This was situated over the position of the artery, and below this point all evidence of arterial pulsation ceased. The forearm and hand were greatly congested, the veins distended almost to bursting, the color of the skin was dark and mottled, the limb cold, the temperature being below the normal standard. A consultation of the surgical staff was hastily summoned, and in the meantime the limb was supported on a pillow, and hot flannels applied to restore warmth and favor the circulation. In consultation it was suggested to make an exploratory incision over the course of the vessel, ligate it above and below the point of injury, and turn out as much of the blood-clot as possible to relieve tension and endeavor to save the arm. During the two hours which had elsaped the same state of things existed, if anything, in an aggravated form, the superficial stasis and coldness of the limb had extended, and the swelling had increased; the pulse, which at the former visit was

moderately full and 80 per minute, had become more rapid and somewhat weaker, and there was perfect absence of sensation as high as the middle of the arm. The patient was placed under ether, the subclavian artery was compressed with the handle of a door-key, where it passes over the first rib. The arm being by the side, an incision three inches in length was carried down directly over the situation of the artery; the centre of the incision being at the point where pulsation had ceased, as ascertained by the stethoscope. A large blood-clot was removed, and the artery and median nerve hooked upon the finger; the wound in the vessel was quite apparent, and carbolised catgut ligatures were applied above and below the injury. The upper ligature was applied at the point where the vessel passes over the tendons of the teres major and latissimus dorsi muscles, which were quite visible. As much of the blood-clot as possible, without disturbance of the parts, was pressed out.

The injury to the bone was a simple transverse fracture; the upper fragment was lying in front, and drawn inwards; the lower fragment was drawn upwards and outwards, and there was shortening of about an inch and a half. Extension of the limb brought the fragments near together, and, by a little manipulation, the broken ends were accurately adjusted. The wound was cleansed with a warm solution of 1 to 40 of carbolic acid, the wound closed with catgut sutures, and dressed with the usual antiseptic dressing; outside of the dressing, two pieces of Gouche's splinting were fitted, and retained in position by a couple of bands of ordinary bandage, and the hand and forearm swathed in a flannel bandage. The operation was performed under the spray, and with full antiseptic precautions. There was one circumstance which was quite noticeable at the time of the adjustment of the fragments—a large clot was liberated and came away, and the veins, which previously were flaccid and empty, at once became distended, and the stasis in the forearm and hand was relieved. Before applying the flannel bandage the parts had assumed a more natural hue. At night she was very comfortable; there had been considerable draining away of serum tinged with blood; the color of the forearm and hand was natural, and the warmth of the limb appeared to be that of the rest of the body; there was, however, no pulsation to be felt at the wrist.

May 31st. She had passed a fairly good night, had slept at intervals, and had taken nourishment in small quantity, principally milk. The evening temperature was 101°, and had fallen to 99.2° in the morning. There was no pulsation at the wrist. Very little discharge had escaped since night, except bloody serum, which had apparently dried, so that I did not disturb the limb by changing the dressing.

June 1st, 1 p.m. I dressed the arm to-day; the wound was looking well; discharge trifling, and of the same character. The fullness about the front of the chest beneath the clavicle had greatly lessened. The same dressing was applied. On careful examination, the pulse was distinct at the wrist, though small in volume as compared with the opposite arm. This was forty-five hours since the ligation of the vessel, and about forty-eight since the accident.

From this time forward she progressed slowly, but favorably; the wound closed, and union between the broken fragments of bone took place, and the patient left the hospital towards the end of July.

Dr. Fenwick said:—This was a case of unusual occurrence, and is of interest in illustration of the surgical principle of ligating a vessel at the point of injury. There are other conditions connected with the case which might render this line of practice objectionable, and to which exception might be taken, as the converting a simple into a compound fracture. The case was desperate, and one of two things had to be done: either ligate the vessel, and endeavor to save the arm, or pra ctise amputation at the shoulder-joint.

The conversion of a simple into a compound fracture, always a serious injury, and to be avoided if possible, is less feared now, with the use of aniseptic means, which, in this instance, were fully, carried out. A most interesting circumstance connected with this case was the accuracy with which we were enabled to ascertain the actual point of injury to the vessel by the use of the stethoscope; the humming of the artery could be distinctly made out to cease at a given point, opposite to which was an abraded portion of skin and exactly at this point the wound in the vessel was found.

Another point of interest was the return of the radial pulse forty-five hours after ligation of the vessel.

Dr. HINGSTON approved of Dr. F.'s treatment of the case, and thought that no alternative should have presented itself but to cut down to the middle of the surface and ligate the vessel.

Dr. SHEPHERD, who assisted Dr. Fenwick, said that why they thought of amputating was because of the condition of the parts—the tissues were much swollen and dark, the clavicle could not be felt. Amputation has been resorted to in similar cases by London surgeons.

In answer to questions by members, Dr. Fenwick said the vessel was not cut between the ligatures; collateral circulation was established in a few hours, as shewn by the limb becoming warm and good color. More danger of secondary hemorrhage if tied subclavian, for the distal end of the artery would be open, and collateral circulation would set up secondary hemorrhage.

Dr. HINGSTON exhibited a uterus, removed by him on account of a generally diseased condition and persistent sweating of blood after separating a very firm adhesion between it and a thirty pound ovarian tumor. The other ovary being diseased was also removed. The shock was not great.

Operation was performed three days ago. Patient is doing well, temperature and pulse under 100; no vomiting. Did not use the spray, but carbolic acid mixed with water on all the instruments and dressings.

Dr. SUTHERLAND exhibited two specimens of extensive sarcomatous disease of the ilium.

Dr. REED mentioned having seen several persons lately who had been severely stung about the face and head by insects, and suggested there must be more than a usual number of these insects about.

Dr. SMITH reported a case of aphasia from pressure of a thyroid abscess, occurring as a complication in pneumonia. The symptoms disappeared on opening, and giving vent to the pus.

Dr. REED spoke strongly of the folly of medical men writing puffs and recommendations for patent medicines of unknown composition.

ANNUAL MEETING.

MEDICO-CHIRURGICAL SOCIETY.

Held October 12, 1883.

The retiring President, Dr. Kennedy, gave the following address:

GENTLEMEN,—Your kindness in eleting me to the office of President of this Society at your last annual meeting has, among other things, invested me with the responsibility of presenting an address to-night which, in some measure, is expected to bring before you a review of our work during the year just ended. This Society has now been in active existence for many years, and its history shows that ever since its formation, or should I rather say regeneration (for it may be looked upon as the successor of previous existing societies), it has manifested a vitality which promises to maintain its existence for an indefinite period. The influence of such a society as this must always be beneficial: bringing into friendly intercourse members of our profession who otherwise might not have the opportunity of becoming properly known to each other, obliterating personal hostilities, and exchanging distrust and prejudice for a respect for the opinions of others and sympathy in the life-work of each individual whose lot is cast among us. There can be no better mode of cultivating a true friendly spirit and generous rivalry, or of inculcating a regard for rules of ethics, for it becomes impossible not to uphold the professional repute of one member when accustomed to meeting him here in friendly discussion. It engenders a feeling of respect for our profession which in its reaction elevates that profession in the minds of the public. This social aspect of our meetings I regard as not the least valuable feature in them. If, however, these meetings had no other end than the pleasure of meeting each other, if it accomplished no other good than affording opportunities for social intercourse and the interchange of personal courtesies, binding together those having identical aims and aspirations in this high calling good would result. But we assemble for graver purposes in the progress of medical science and art. As in other departments of human activity the range of learning and discovery is ever enlarging its boundaries, and, therefore, we come together each to bring his contribution to the common fund of facts from which the laws of disease and the instruments of its alleviation are to be derived, and by enlightened discussion record our observations which otherwise might be lost or hidden within the chambers of our memories.

The Society has held its meetings only eighteen times during the past year, an unusually small number. This has been due to the difficulty of obtaining papers from our members. This is a difficulty which requires a remedy. Many mem-

bers attend our meetings regularly, but do not add anything to our work or contribute but little to the discussions which take place. Original papers cannot always be expected, nor is it desirable that we should confine our discussion to extraordinary forms of disease. I think that we are too apt to look for something brilliant in what is brought before us, overlooking that which might be called common but which, if attention was directed, would excite a strong debate and refresh our ideas in regard to the treatment of such disorders. It would certainly teach us to avoid a mere routine, and, speaking for myself, I am pleased to say that attendance on these meetings has given me many a useful hint and added instruction on many points which otherwise might not have been obtained. I trust that my successor will be able to make a better return at our next annual meeting, and that our secretary will not find it so difficult to obtain papers in future. Several of the papers have been hurriedly prepared to fill the want, otherwise fewer meetings would have been held. One very valuable one was by Dr. Osler and Mr. Clement on Parasities in the Pork Supply of Montreal. At the meeting at which the paper was presented members of the Board of Health and other interested persons were invited. From a sanitary point of view it was specially valuable, and much credit is due to the gentlemen who had taken so much trouble in bringing it before you. I am afraid, however, that it has had but little influence in producing any result, so far as our sanitary authorities are concerned.

In addition to papers we have had interesting cases in practice related by several of our members which, in some instances, incited considerable discussion. Patients suffering from peculiar forms of disease have been shown by Drs. Hingston, Gurd and Wilkins, and a large number of pathological preparations exhibited, chiefly by Dr. Osler—on whose labors in this line I need not dilate—and also by Drs. Ross, Bell, Shepherd, Wilkins, Alloway, Fenwick, Gardner and Trenholme. These preparations, though gratifying to our visual organs and instructive to our mental faculties, did not always invest our persons with the odor of sanctity. Among matters which may be termed miscellaneous may be mentioned the reporting of the proceedings of the Society by our medical journals, under the supervision of a publishing committee. This arrangement has worked fairly well, and has done much, I think, by giving due publicity to our work, in interesting country practitioners who, from their positions, are unable to become workers in any society; besides it furnishes a record which will be found useful to the future compiler of the medical history of the city. To our Secretaries we are indebted for the able manner in which they have performed their really arduous duties in this respect, and you have acknowledged this service when bidding adieu to the gentlemen whom you elected to the office last year. Dr. Henderson proved himself an efficient worker whom we could ill-afford to lose, but I am happy to state that in the new sphere of his labors he is meeting with that deserved success which his merit entitled him to. Though some familiar faces are not with us to-day their work being elsewhere, new faces have joined us, and keep up the number of our roll call. Rarely does a twelve months elapse without having the lesson exemplified "that in the midst of life we are in death." We have been called upon to mourn the loss of two old familiar friends; both ended lives of usefulness and industry at an advanced age. In their loss we mourn no unfinished career, "cut untimely off,"—I allude to the death of Dr. David and of Dr. Scott. The former, once President, has left us a valuable record of the early history of medicine of this city in his reminiscences, which was read at a meeting of the Society shortly before his death; and to those of us who knew him as an active member of the profession he will be remembered with that kindly respect which an upright and able life-work prompts us to feel. The latter will also long be remembered by those whose privilege it was to listen to his teaching which had extended over so many years.

Passing from these sad memories I recall to your recollection the pleasant meeting which was held during the last Xmas holidays. I was, unfortunately, unable to attend, but, from what I heard of it, the relaxation from graver matters, though it may not have advanced science, tended to promote harmony and good fellowship and will, I hope, be followed by like meetings at similar seasons in future.

In conclusion, let me thank you for the courteous manner in which you have borne my deficiencies as Chairman. Circumstances over which I had no control prevented me from being present at more than ten meetings, but I have endeavored to fulfil the duties imposed on me,

and, as a member, I shall ever take a deep interest in the work of the future.

The following officers were appointed: President, Dr. Rodger; 1st vice-president, Dr. Cameron; 2nd vice-president, Dr. Osler; secretary, Dr. Gurd; treasurer, Dr. Molson; librarian, Dr. Foley.

Council—Drs. Ross, Campbell and Buller. Publishing committee—Drs. Ross, Cameron, Osler and Kennedy.

Dr. Wood read a paper on "Treatment of Urethral Stricture." (This will be found in another column.)

Dr. HINGSTON took exception to Dr. Wood saying his case was cured, and thought he ought to examine him again, for even after years he had known them to relapse, especially when treated by dilating. In dilating we should not stop with No. 12, as 18 was more like the full size of the male urethra. Dr. H. said it was extraordinary how surgeons differed in their treatment of these cases: Otis strongly advocating internal urethrotomy with dilatation, while an eminent surgeon of Boston dilated the urethra so forcibly as to tear the stricture. This surgeon told Dr. H. that it was their practice at his hospital always to so treat stricture, and that the results were most satisfactory. All these methods were good, but the difficulty lay in finding out which would suit your case best. At a meeting long since, he advocated internal urethrotomy as best for most cases, but now believes that ascertaining the size exactly before and behind the stricture, so as to dilate to the fullest, gives the most satisfaction. The tolerance of the urethra indicates which method to employ. Some being most intolerant, and, after passing of an instrument, are followed by high fever, and even death has resulted from simply using a bougie or catheter. One instance he knew of where the person dropped dead at once. Has noticed that French Canadians are very tolerant. Dilatation with division is the latest treatment, and the one now most used. There is no necessity for dividing if you can get through a No. 6 English. The two kinds of stricture most difficult to treat are the very small and very large. If calibre very much narrowed, he either gets in a piece of whale-bone and passes others by the side of it or else the pathfinder, and over it sends the urethrotome, and cures at once, by dividing. Believes division also best for slight stricture in a large urethra.

Dr. WILKINS said, when treating cases in Hospital, if found the calibre very much narrowed, he introduced a whalebone probe, and then Otis modification of Thompson's divulsor, and dilated to full extent, but often had sharp and troublesome fever follow. Lately has been well satisfied with gradual dilatation by means of Lister's sounds.

Dr. SHEPHERD said he believed Dr. Wood's case to have been one of hypochondria, and that the man had inflamed his urethra by treating himself. Dr. Shepherd treats stricture by gradual dilatation, excepting the resiliant kinds which must be cut. He never knew a case of real stricture to be permanently cured. Has several times seen urethral fever follow the passage of a bougie. Has a patient now, who has fever follow each passage of bougie, and believes this to be a case for division.

Dr. MCCONNELL criticised Dr. Wood's prescription, and said the fact was well established now that Liq. Potassa and all mydriatics were incompatible.

Dr. Wood replied by saying that, if well diluted, Liq. Potassa and the mydriatics would retain their virtues for a few days. The Liq. Potassa in his mixture of hyoscyamus was well diluted, and only enough at a time was made to last three or four days. Dr. W. was sure his patient had stricture, and that now he was cured.

Dr. RODGER said he used gradual dilatation but often saw relapses.

Dr. CAMPBELL was astonished at Dr. Shepherd saying he never knew of a permanent cure. Dr. C. knows of many gentlemen in this city whom he had treated twelve and fifteen years ago, and who are now fathers of families, and who have not been troubled with their strictures since.

Dr. H. HOWARD suggested that, perhaps, the reason for their not having stricture, after being married might solve the riddle by shewing that the relapses spoken of by the members were nothing more than new attacks.

THE PROVINCIAL MEDICAL BOARD.

The semi-annual meeting of the Medical Board of the Province of Quebec was held in the city of Quebec, on Monday, 26th ult. The following members were present:—Dr. C. E. Lemieux, President; Hon. Dr. J. J. Ross, Vice President; Drs. A. G. Belleau and F. W. Campbell, Secretaries; Dr. E. P. Lachapelle, Treasurer; Dr. Larue

Registrar. Hon. Dr. Robitaille (Lt.-Governor), Drs. Joseph Lanctôt, J. A. Duchesneau, R. A. Kennedy, D. A. Hart, Malcolm Guay, W. Marsden, Charles Gingras, R. P. Howard, J. L. Leprohon, T. A. Rodger, Geo. Ross, H. A. Mignault, P. E. Grandbois, Jos. Marmette, L. D. Lafontaine, N. H. Ladouceur, C. S. Parke, E. A. de St. George, Henry Russell, L. T. E. Rousseau.

The minutes of the last half-yearly meeting, 9th May, and of the triennial meeting of the 11th July last, were read and approved.

It was moved by Dr. Lafontaine, seconded by Dr. Howard, and resolved, " That the members of the Provincial Medical Board have learned with much regret of the death of the lamented Dr. Ed. Laberge, of Ste. Philomene, a member of the Legislative Assembly of the Province of Quebec, and formerly a governor of the College of Physicians and Surgeons of this Province ; that the members of this Board desire to express their sincere sympathy with the family and friends of the late Dr. Laberge in the irreparable loss which they have sustained by his death, which occurred on the 22nd August last.

The reports of the assessors of Laval University Medical School, Quebec and Montreal, were received and accepted.

The Secretary of the Pharmaceutical Association communicated to the Board that the following substances have been added to the list of poisons, and suggested the approval of the Board therefor. This was granted. The drugs are as follows: Croton Oil, Chloral Hydrate, Croton Chloral, Belladonna and its preparations, Digitalis and its preparations, Indian Hemp and its preparations, Chloroydne and Paregoric.

It was moved by Dr. Lachapelle, seconded by Dr. Howard, That a committee, composed of Drs. Campbel, Trudel, Lanctot, Duchesneau, the mover and seconder, be appointed to make enquiries concerning complaints which have been made of the present mode of conducting the preliminary examinations ; and that this committee be authorized to call together the directors of the colleges and high schools and normal schools of the Province, as well as the Examiners for the Board, in order to confer with them, and to ascertain whether the present programme of the preliminary examination corresponds with that of the teaching given in these establishments: and without in any way diminishing the severity of the examinations, to arrive at an understanding which would be highly advantageous to all, and which should put an end to the existing discontent by showing that incapacity alone can be the cause of rejection at the preliminary examinations.

A committee was then named to examine the credentials of candidates and another to conduct examinations for the license.

A committee, composed of the President, Vice-President, the Secretary for Quebec, and Dr. Marsden, was appointed to draw up and submit to the Legislature an amendment to the law governing the practice of dentistry in this Province.

The following graduates were sworn, upon presenting the diplomas of their respective Universities, and received the diploma of the College, viz.:—MM. Nap. Morency, Ste. Marie de la Beauce ; Edmond Perron, Eboulements ; Chs. Tessier, St. Bonaventure d'Upton ; Emil Sylvain, Cap. St. Ignace ; Geo. Wm. Lachaisne-Jolicœur, St. Sauveur de Quebec ; W. G. Thompson, Henri Archambault, Joseph Théodore Peladeau, Jean Frédéric Prudhomme, A. J. Hopkins, Avila Gauthier, Ls. Arthur Moll, Jas. Steward, Edmond Bastien, Guillaume Frs. Prévost.

Four candidates presented themselves for examination for the license. Of these, one only, Allan D. McMillan, was admitted.

On motion the thanks of the College were given to Laval University for the use of their rooms ; and the meeting adjourned at 5 p. m.

Progress of Medical Science.

VOMITING OF PREGNANCY.

The following drugs have been recommended for this distressing symptom, which we here arrange alphabetically rather than in the order of their relative importance :

Arsenic, in the form of Fowler's solution, in drop doses, given before meals, is often of great advantage.

Atropia has been highly recommended for the vomiting of pregnancy, in the dose of 1-120 of a grain, injected subcutaneously in the epigastric region. It is said to arrest it promptly and permanently after other remedies have failed.

Bismuth, subnitrate, in ten-grain doses, combine with ¼ grain carbolic acid, mixed with a suitable adjuvant, to be taken three or four times daily.

Calumba, in tincture, dose five to ten drops ; in infusion, dose, teaspoonful.

Cerium, oxalate, dose two to five grains. Usually the best effects are produced after several days' use.—*Sir James Simpso.*

Champagne, tablespoonful doses with ice, every fifteen minutes.

Chloral hydrate, with bromide of potassium, ten grains of each at night when the symptom first develops.—*W. C. Burke.*

Copper, sulphate, 1-20 grain three times daily.

Hydrocyanic acid, dilute, three drop doses once in four hours.

Iodine, tincture, drop doses every hour or two.

Nux vomica, tincture, drop doses every hour or two.

Pepsin, five to ten grain doses.—*Medical Bulletin*

THE TREATMENT OF PHTHISIS BY IODOFORM.

Dr. Dreschfeld has continued his observations since his first communication. (*British Med. Journal.*) The favorable opinion then formed has been further strengthened by the results obtained. Of sixty-four cases of confirmed phthisis, more or less advanced, and concerning, to a great extent, out-patients at the Manchester Infirmary, thirty-four cases only had been under treatment sufficiently long to be available for the purposes of this communication. Of these thirty-four cases, four were in so far advanced a condition that the iodoform was only borne in the form of inhalation, but gave no results. Two cases were complicated with amyloid disease, and here also the iodoform was useless. Of the remaining twenty-eight cases, ten showed either no improvement or only a temporary improvement (increase of weight, improvement of appetite, decrease of cough and expectoration); while the physical symptoms showed no alteration at first, but afterwards the phthisical process gradually advanced, and associated again with loss of flesh, night sweats, etc. Of the remaining eighteen cases, some showed slight but steady improvement, broken only temporarily by a fresh cold or some complication, such as gastric catarrh, pleurisy, etc.; while in six cases the improvement was most marked and beyond all expectation, the increase in weight amounting in one case to fourteen pounds, in another to ten pounds, and in a third to eight pounds, in one month. The physical symptoms also improved; the sputa, however, continued to contain tubercle bacilli. The iodoform treatment was also tried in six cases of incipient phthisis. Of these, two had only been under treatment a very short time. Of the four remaining cases, two showed no improvement; one was at once benefited, cough and expectoration entirely ceased, the apex catarrh disappeared, and the patient felt now perfectly well. In the second case (reported in the *British Medical Journal*),the treatment was equally successful—only, however, after having been continued for a longer time. There being an almost entire cessation of cough, it was difficult to obtain any sputa; one specimen, however, was obtained, and this was found free from bacilli, while before they were found abundantly. Two cases of laryngeal phthisis, treated both internally and by inhalation, and also locally by the application of iodoform powder to the ulcers, gave satisfactory results; the ulcers cleared and became smaller, and the general condition improved. The iodoform was given in the form of pills (one grain of iodoform, two grains of croton chloral, one minim of creasote); and in the form of inhalation (twenty grains of iodoform, twenty minims of oil of eucalyptus or ten minims of creasote, and half an ounce each of rectified spirit and of ether). The inhaler used was one devised by Dr. W. Roberts, consisting simply of horse-hair matting, to the inner side of which was attached some flannel or cotton-wool; and on this the inhalation mixture was dropped. The cost of the inhaler was about three pence. Where the pills were badly borne (especially in women) the iodoform was added to cod-liver oil. In very young children, iodoform inunction, made with olive oil or vaseline, was to be recommended; while older children seemed to take iodoform, either as powders or in small pills, very well. The good effects of iodoform seemed to consist in the following: (1) Increase of weight; (2) increase of appetite; (3) diminution of cough and expectoration; (4) diminution or even total cessation of night-sweats; (5) the temperature was often a litttle lowered. No symptoms of iodoform intoxication had ever been seen. Several medical men who had tried the iodoform treatment had also obtained very satisfactory results.

THE TREATMENT OF BRIGHT'S DISEASE OF THE KIDNEY.

Joseph Kidd, M.D., writes, in the *Practitioer*, on this subject, as follows:

The treatment of disease of the kidney labors under a disadvantage compared with that of pulmonary disease. In the latter, cough, expectoration, breathlessness, wasting, night sweats, easily convince the patient and friends that he is really ill, and that the doctor's care and cautions are not unnecessary or uncalled-for. In kidney-disease, on the other hand, there are few objective symptoms, as the patient does not lose flesh or muscular power, seldom has pain in the back or difficulty of urination. He will often protest "there is nothing wrong with my kidneys, for I have no pain in my back." Thus the doctor has much difficulty to get the patient or his friends to take sufficient care or to submit to treatment. The nausea of the latter stages of Bright's disease helps the illusion. It is only when the uremic symptoms come on that the patient can be induced to take care. They often try to weaken the precautions laid down for them.

In chronic disease of the kidney the treatment must be to a great extent hygienic and dietetic. It

acts like an impetus toward health in such cases for the doctor, after prescribing for a month or two's course of medicinal treatment,to dismiss the patient for a season with a cheery word. "Medicine has done its work; now lay it aside for a time, and trust to wise management of your habits of life, diet, exercise, clothing," with a distinct piece of advice concerning each; yet the physician must be on the alert not to repeat vague generalities, but to give a sharply defined course or plan of general management.

In the treatment of granular degeneration kidneys, the gout kidney *par exellance*, I can speak with much confidence of the good effects of nitric acid. In many phases of the disease, especially when the urine is very pale, of low specific gravity and highly acid, with nausea, anorexia, furred tongue, it suits when iron and quinine disagree. It exerts a specific action on the urine, causing the turbid to become clear; and at times it does the opposite,causing the pale clear urine to become turbid and dark-colored. It also relieves the gout pains in the joints incidental to the disease. The perchloride of iron is of infinite use in the treatment of Bright's disease. In the latter stage of true granular degeneration it often causes headache and increases the nausea. Then the liquor ferri pernitratis (Ph. B.) suits better, the free nitric acid in it causing the iron to be more easily assimilated.

The use of milk in acute and subacute kidney-disease has the best effect, but one gets disappointed at the negative results in old, long-standing cases, its presistent use causing little or no improvement in the condition of the urine. J. drank two quarts of milk for six months without perceptible effect on the chemical or microscopical character of the urine.

After twenty-five years' experience of the use of all kinds of baths in the treatment of kidney-disease I have found lamp baths excel all others in real efficacy. The spirit-lamp bath without water has a better effect than the vapor of water boiling over the spirit-lamp, which most patients complain of as being more relaxing and exhausting than the spirit-lamp alone. Used at bedtime for fifteen or twenty minutes, three or four times a week, the effect is all we can desire. The gentle moisture kept up in bed all night after the bath does much more good than the Turkish bath, the good effect of which is neutralized by exposure to the cold air afterward. When the patient lives in the establishment, so as to go straight to bed after the Turkish bath, its use is invaluable. Under such conditions it may be taken even twice a day with advantage.

Counter-irritation plays a most important part in the management of chronic Bright's disease. Its effects are especially good in all intercurrent attacks. When from a chill, or over-fatigue, or change of climate, the urine becomes disturbed in character, either cloudy or very limpid, mustard-plasters over the lions have a most perceptibly good effect, or compresses of spongio piline sprinkled with a few drops of oil of turpentine. In subacute congestion a small blister over the kidneys has a good effect as a counter-irritant. It probably has by absorption also a specific action in clearing the debris from the tubuli uriniferi.

Open-air exercise is an essential element in the treatment of chronic disease of the kidneys. It is, however, of vital consequence to the subjects of that disease to avoid chill when heated by exercise, returning home quickly to charge the moist underclothing.

In selecting a winter climate suitable for a case of kidney-disease, dryness and equability are the essential requirements. Heat is desirable, but not so essential as freedom from sudden changes.

When there is an inherited tendency to kidney-disease, the treatment of scarlatina is of great consequence, as it so often proves the exciting cause of that disease. The special care needed is strictly to confine the patient to bed for at least week or ten days; the free use of diluents, water or milk; the avoidance of much animal food; and the free use of vegetables. After the eruption has disappeared, the use of warm-water baths every night for three or four weeks, warm woolen underclothing in the day, and at night to sleep between the blankets, should be advised. The rubbing with carbolic oil should be especially avoided, as although it lessens the intensity of infection, yet I have known it to act injuriously on the kidneys; in fact, setting up the albuminuria.

INFANTILE LEUCORRHŒA.

Clinical lecture by Prof. T. Gaillard Thomas (*Med. ad Surg. Reporter*):

GENTLEMEN,—The little girl, nine years old, whom I first bring before you, is suffering from a very profuse leucorrhœa, which her mother informs me she has been unable to cure by any of the remedies which she has employed, and which has now lasted for two months. I, of course, made a vaginal examination, and, on separating the labia, I found that the whole vulva was about the color of red flannel, and bathed with a copious leucorrhœal discharge. The meatus urinarius was also seen to be in the same condition, and urethritis has, no doubt, been set up by the spreading of the irritation. If it had been necessary, I could have introduced a small glass speculum into the vagina; but this was not required to make a diagnosis, as I saw exactly what was the matter without resorting to this.

Not unfrequently mothers will bring their little girls to you in this condition, and they will sometimes be in a state of great agitation, because they are afraid the trouble has been the result of injury done the children. There is ordinarily no reason whatever to suspect anything of the kind, and you can at once quiet the anxious mother's mind. The affection is a perfectly simple one, and is

perfectly curable also. What is it, then? It is generally known as infantile leucorrhœa; but infantile vaginitis would be a better term for it.

Now as to its causes. One of the most frequent of these is neglect of hygienic precautions. There is generally no intentional neglect on the part of the mother or nurse; but, on account of the undeveloped condition of the part, an accumulation of hardened secretion sometimes collects in the same way as that which not unfrequently gives rise to balanitis in the male child. Another common cause is the depreciated condition of the child's system, such as that due to spaænmia, in which all the mucous membranes are apt to become more or less affected. Thus, there is often gastric and intestinal, as well as nasal, catarrh. A third cause that may be mentioned is reflex influence from the rectum. The cause of the irritation in the rectum is usually ascarides, and an afflux of blood to the part is caused by the itching and irritation.

In some instances the ascarides, by getting into the vagina itself, are the direct cause of the trouble. The prognosis of this affection is, that it can be cured at once if it is properly treated.

In the treatment the first thing to do is to see if there are any worms present, and if so (or there is any reason to suspect that such is the case), use an injection of warm salt water, as this form of ascaris (the *ascaris vermicularis*), as well as others is unfavorably affected by salt. The next thing to do is to get the child's general system in the best condition possible by appropriate food, iron, vegetable tonics, and the hypophosphites. It is better to depend on nourishing diet, however, than on medicinal agents. If after the worms have been gotten rid of the vaginal irritation and discharge should continue, or if no worms should be found to be present, local treatment will be required. The vagina should be thoroughly washed out by means of a syringe provided with a small nozzle, which ought to be well oiled before being introduced. In order that the canal may be perfectly cleansed, the child should be placed upon the back. In some cases the mere removal of the accumulated secretion, which is a constant source of irritation, is all that is necessary; but if the trouble has gone on for some time, this may not be sufficient. Something further is then needed, and one of the best applications to use is the old-fashioned black wash (calomel and lime-water) in the strength of one ounce to the pint of water. Before using this (which should be done twice a day) an injection of simple warm water should be made. I have never yet seen a case of infantile leucorrhœa that could not be cured by such treatment as this; so that there is no necessity of resorting to astringents and nitrate of silver, which may perhaps do harm. If it is adopted here, I have no doubt that in less than two weeks this child will be entirely well.

But there is one mistake which is apt to be made by the physician in these cases, on account of which a much longer time may be required for a case than is at all necessary, and that is, the failure on his part to show the mother or nurse how to introduce the nozzle of the syringe properly. Mothers, unless they are especially instructed in regard to this point, never carry the nozzle more than an eighth of an inch up into the vagina, and as it is above this that the degenerating pus is found, there will be no improvement, simply because the injections fail to reach the real source of trouble. It is not enough even to show the mother how to use the syringe, but you should also watch her do it, and see that the upper part of the vagina is reached. In a child of this age, the rectal ube of a Davidson syringe should be employed

CHLORAL POISONING.

What are the remedies to be employed in acute chloral poisoning? They are especially those designed (1) to sustain the action of the heart, such as ammonia and brandy; (2) to keep up the breathing by artificial respiration, if needed; (3) to keep the patient warm; and (4) to use electricity as a cutaneous stimulant, Thus far you would treat a case as an ordinary one of narcotic poisoning. But is there any remedy that will counteract the depressing effects of the chloral upon the nervous centers, and particularly the respiratory center? Yes; the remedy for this purpose is strychnia, which antagonizes the chloral. It may be used as we gave it here, hypodermically, one sixtieth of a grain every three hours at first; and it would have been given oftener, but it was not needed. Strychnia therefore is indicated as the physiological antidote. It stimulates the centers which have been depressed by the chloral. When recovery takes place, it is usually rapid.

What should be the treatment of chronic chloral cases? Suppose that a patient like this says that the habit is growing upon him, and comes to you for advice, what course would you pursue? I would answer that you must reduce the dose gradually. As large doses of chloral are only given exceptionally, there will be less difficulty on this score than with opium; but as you reduce it I would strongly advise you to give strychnia or nux vomica for its effects on the nervous system. It antagonizes the effects of the chloral, and acts as a tonic at the same time. Those nervous centers which are reduced in their activity by the paralyzing effects of the chloral are stimulated by strychnia. If you use strychnia you may stop the chloral almost at once without any bad effects being observed. I had a case in point last summer. A gentleman who had been taking chloral for some time found himself very weak, his will-power impaired, and he felt miserable. He determined to stop off entirely. He went to Atlantic City without a single grain of chloral. He took constant out-door exercise. He was sleepless for a time, but he was able to overcome

his evil habit; and, althought he had been using chloral regularly for eighteen months, he recovered entirely. It should be stated, however, that while giving up the chloral habit he took from time to time strychnia or nux vomica.—(*Phil. Medical Times.*)

FISSURE OF THE ANUS.

(Thos. Hay, M.D., in Medical and Surgical Reporter, April, 1883.)—The value and efficacy of iodoform in fissure of the anus will bring this remedy into general use in the treatment of this painful and heretofore incurable lesion, without operation by the knife or forcible rupture of the sphincter-ani muscle.

As in cases involving the greatest danger, so with fissure of the anus—if the trouble can be cured by simple means, without suffering to the patient, and in reasonably due time, the operation of cutting or forcible rupture is not justifiable, and both these means of radical cure must give way to the more simple, if such may exist. With the experience I have had in the use of the local application of iodoform in cases of fissure of the anus, I am encouraged to bring the value of this remedy to the notice of the profession in these cases. In their treatment with this remedy, the alvine evacuations should always be maintained in a soft condition, the bowels should never be allowed to become constipated or relaxed; the anus, and parts involved by the fissure, should be kept constantly clean and free from deposit and dry incrustations; and, with one or two evacuations a day, the case may be speadily cured by the local use of iodoform. It may be dusted, in *very fie* powder, upon and into the fissured parts, or applied in the form of ointment or suppository. The application of the simple powders, if properly prepared, three or four times a day after each evacuation, and in the intervals, is often sufficient. In some cases, however, the undiluted powder—although thoroughly powdered—causes some pain. In such the iodoform may be mixed with powdered gum acacia, if a powder be preferred, or may be made into an ointment with vaseline, or suppository with the oil of theobroma. Balsam of Peru, carbolic acid, and oil of peppermint, will moderate the intensity of the iodoform odor; but this can hardly be requisite for application in this situation. The application of the remedy may be followed by a little smarting, but soon after its use the sensibility of the parts becomes benumed, and even defecation may go on without consciousness so far as concerns the development of pain during or after the process. That this remedy applied as above directed and indicated will cause complete unconsciousness of the act of defecation, I doubt —I have never witnessed such result in any case that has come under my notice, and still the benumbing influence of the remedy is decidedly potent. As in applications to the conjunctival surfaces of the eyelids, the first and most important factor in the successful and painless use of the remedy consists in the proper preparation of the powder. It should be made *very fie*, and not the smallest crystal be allowed to remain unpowdered. The neglect of this precaution when applied to the eye has caused the most painful inflammation of the ocular and palpebral conjunctiva, and, applied thus imperfectly powdered to the anus, would likewise cause intense suffering and, as in eye-practice, would be abandoned and declared to be dangerous and valueless, if intelligence did not bring relief.

DIPHTHERIA AND PARALYSIS OF THE VOCAL CORDS.

From a lecture by Dr. Morrell Mackenzie, published in *Med. Record*, we extract the following:

I think that, at the beginning, diphtheria is a local disease. I believe that the effect of the poison may sometimes be so great that the disease appears to be constitutional from the commencement. I believe that such cases are analogous to those of scarlet fever or small-pox, where the patient is struck down at the very moment of the invasion of the disease. The poison must enter through some part of the system, and I believe that it is local at the beginning. These points bear upon prognosis, and are of great importance. From prognosis we will now pass to

TREATMENT.

Here, again, remedies of the most varied character possible have been recommended. I recollect reading a paper written by a French physician, in which he said he bled every patient, and that he treated fifty or sixty, and every one recovered. All I can say is that if we should treat diphtheria in London in this way, I think we would almost be prosecuted. It is exceedingly bad treatment. It only shows that it is possible to make a bad diagnosis, or else it is possible for some people to stand depletion in a most extraordinary manner.

The first great point in the treatment of this disease is to attend to constitutional measures and then to local treatment. The constitutional treatment is of no less importance than the local. It is necessary to support the patient from the beginning, and stimulants are of the utmost importance. Do not wait until the patient becomes depressed, but give stimulants from the very commencement. This is an exception to all diseases, and you must begin with stimulants at the commencement, and give them in the more solid form, such as brandy diluted with water, or port wine; such as furnish nutriment as well as alcohol. When the patient is beginning to recover, the light wines, especially champagne, are useful; but, in the early stages, port wine with water is one of the most useful you can give.

Stimulants must be given during the night as well as during the day in a very large number of

cases. I have seen many cases where patients have died through want of having stimulants administered during the night. In young children it is very frequently necessary to awaken the patient and give stimulants. As a general rule, it is bad to wake a patient out of a refreshing sleep to give medicines; but here is an exception, and I would say that if the child sleeps more than four hours, it must be awakened and stimulants and nourishment administered.

We now pass on from the use of stimulants to the use of medicines. Here, again, we meet with a very great variety, but the most useful, perhaps, of all is the perchloride of iron. In this matter I am entirely in accord with Professor Jacobi, who has found the remedy more useful than any other. Professor Jacobi has laid it down that this medicine should be given in full doses. It is also important to give a per salt of iron, which can be assimilated with comparative ease, and probably the perchloride is the best you can use, and of it at least a drachm a day, diluted with water, should be administered; fifteen drops, well diluted with water, four times a day. The only time when I have not given the perchloride of iron has been when I have been trying the local effects of some agent that has been employed. Quinine is a very useful medicine. When the temperature is high it has a very great effect in bringing it down nearly or quite to the normal. These are perhaps the most important of the constitutional remedies.

All sorts of specifies have been recommended, but I have not had much success with them. Chlorate of potash has been very much praised, both as a constitutional and a local medicine. You may give it, because it cannot, in proper doses, do much harm, and it may do some good. There is one remedy which has been recommended by a gentleman whom I see before me, Dr. Beverley Robinson, and that is copaiba, which has an important effect upon mucous membranes, as possibly some of you may have had occasion to observe. But its effects are not confined to the mucous membrane of the urethra. It also produces a marked effect upon the mucous membrane of the pharynx and larynx, and that of the whole bronchial tract. I have tried Dr. Robinson's recommendation, giving the medicine in the form of pearls, which the French make, and which children take very easily, and I have administered them with great success. But I must mention that I have used it in the catarrhal form of diphtheria—the milder cases where the exudation is not very adhesive. When the more serious cases of diphtheria are about, you get a large number of cases of catarrhal diphtheria, and in those you will find great benefit following the administration of copaiba.

We will next pass to local remedies, and here again we have a very wide field. A great many doctors may go through a lifetime and see only a few cases of diphtheria. Some meet with severe epidemics, and others with epidemics mild in character. The consequence is that an immense number of remedies are not only recommended, but the doctors say that they have not lost a case since they began to use such and such remedies. You must look upon such statements with great suspicion, and it is safe to consider that the doctors who have treated so large a number of cases with such uniform success have, at least, treated a mild type of diphtheria.

The local remedies in most common vogue are lime-water and lactic acid. Both of these remedies have one great advantage; they do not do any harm, and here I may say, gentlemen, that it is a great thing, when you are trying a remedy, to use one that does no harm. In earlier days severe caustics were used, such as hydrochloric acid, nitrate of silver, and, if the patient recovered, it was always thought that event was due to the acid or the silver. But all that has been changed. We now know that if strong caustics are used the effect is almost always to cause extension of the disease. The remedy inflames and irritates, and a false membrane is formed in close contiguity to that which previously existed. When we were suddenly told by German physicians that lactic acid was used with great benefit, and also lime-water, the news was so gratifying that we all used these remedies, which were not injurious or painful to the patient. Both have been found useful.

I ought to say here that certain solutions have been said to be useful because of the effect they produce upon the false membrane, causing it to gradually dissolve and disappear in a short time. But, unfortunately, when we have to deal with the living subject we have a totally different condition of things from that which is present in making experiments, and I have found that when using substances locally sufficient to have any effect upon the false membrane, they had an irritating effect on the mucous membrane which I was treating. Hence I returned to the use of such remedies as do not irritate, and have given up those which had a reputation for dissolving false membrane. With regard to lactic acid and lime-water, they do not have much effect upon the false membrane in the test-tube, but they certainly do seem to have considerable effect when applied to false membrane growing upon mucous membrane. It is very difficult to make accurate observations with regard to the progress of the disease from hour to hour in children; but I have had opportunity to try both remedies upon false membrane inside of the lip and upon the tongue, where I could watch the effect. I recollect three cases in which I tried the experiment with lime-water where false membrane was growing upon the inside of the lip. I treated one side with lime-water and left the other to nature, and the side treated rapidly improved, while the other remained stationary. So I believe that lime-water is useful as a local application, and in this respect I differ with my friend Dr. Jacobi, who believes that both lactic acid and lime-water have been overestimated. I strongly recommend that you should use them in every case.

We now pass on to another class of remedies, which I wish to bring to your notice, namely, those which shut out the air. This class of remedies I have introduced, and they have been employed in England to some extent. I refer to what may be called varnishing the mucous membrane with benzoin, or tolu dissolved in ether or chloroform or alcohol, and also used in various mixtures. I found as the result of considerable experiment that tolu dissolved in ether in the proportion of 1 to 5, made an excellent varnish, and that when applied to the mucous membrane it did not cause pain or inconvenience, was sufficiently strong to hold, and did not require to be repeated. Many of these local remedies have been recommended on the ground that they destroy germs. Just here it occurs to me that I have omitted to speak of carbolic acid and salicylic acid, etc. Carbolic acid is an excellent remedy, and it has the effect, as has been demonstrated, of destroying germs, and if used sufficiently diluted it will do no harm.

All this class of remedies have been recommended upon the scientific ground that they destroy germs.

The principle upon which I have introduced the remedies which varnish the mucous membrane is, that whatever the poisonous element may be, whether a vegetable growth or some other germ, or something else, this living matter that causes false membrane to be formed, requires the presence of air. Directly you exclude the air you prevent the growth of germs which require air for their existence. As soon as possible, therefore, I apply this varnish over the false membrane; not only over the false membrane; but all around it. It is of itself to a certain extent a germ destroyer, but everything depends upon the coating of varnish being air-tight. Some of my friends, at first, found considerable difficulty in applying it, and I also had the same experience. At first I wiped the surface, to which it was to be applied, with blotting-paper. I carefully applied this absorbing material to different parts of the throat, and then immediately afterwards applied this varnish. This plan answers perfectly well when you can do it; but every now and then you will find a patient who will retch a little just after the blotting-paper has touched the surface, and the mucous membrane becomes wet before you can apply the varnish. I then adopted the plan of putting a piece of lint around my finger and drying the throat with this, and then quickly applying the varnish with a brush. This does not hurt the child, and I speak of children because nine-tenths of our cases occur among children, and it answers perfectly well; but if you should have difficulty with this, I should advise you to apply the varnish all the same. I have had several patients treated entirely by the use of the varnish, without constitutional remedies, and with good results.

I shall feel exceedingly proud if, as the result of this lecture, gentlemen shall try the effect of this varnish.

I will now say a few words with reference to the use of steam and the use of ice. Both these remedies are useful, but they should be applied in different classes of cases. In the early stages it is very useful to employ ice. It affords the greatest comfort to the patient. Let them have ice, and take as much as possible. Many young children are pleased to have pieces of ice put into their mouths. There is no doubt that it restricts the associated inflammation so often present. In the early stages it is most desirable to use ice, and you can use any amount of it without doing harm. It is only in exceptional cases, where the patient is very much depressed, and in the very advanced degrees of poisining, where there is gangrene, that ice does harm. In many cases it diminishes the violence of the attack.

With reference to steam, it was first recommended, I think, by Mr. Prosser James, of London. Afterward it was pointed out by Oertel that steam must cure almost every case, and that it was the only remedy of any value at all, because the effect is to separate the false membrane from the mucous membrane. The fact is that when a certain point in the disease has been reached, when the false membrane is beginning to separate, steam is useful. At that time its effect is admirable. In the early stages I do not think it does any good. I think it lowers the vitality of the tissues, and that its effect is most prejudicial; but when the false membrane shows evidences of separating from the mucous membrane its effect is most beneficial. So you need have no fear of clashing heat and cold, for you use ice at first and steam afterward, when the disease has reached a certain stage. One great advantage of steam is that you can use some antiseptic with it, such as carbolic acid, salicylic acid, or any other substance you may choose. And I should advise you to use some mild antiseptic at this stage of the disease, because a certain amount of gangrene is usually present.

TRACHEOTOMY.

These, gentlemen, are the important points which I have to bring before you, and in closing I will make a few remarks only with regard to tracheotomy. The question often arises whether or not you will perform tracheotomy. I may say here that my friend, J. Solis Cohen, of Philadelphia, who is with us to-day, has published one of the most complete essays on tracheotomy ever published in the English language. I think the conclusion which may be drawn from his paper is that the operation should be performed at a comparative early stage. That is the conviction which I have. My advice is that when once there is considerable false membrane in the larynx, when inspiration is so difficult that you see falling in of the sternum each time the patient breathes, and each supraclavicular space deepened with every inspiration, the time has arrived for tracheotomy. But you will examine the whole of the patient's thorax, and most carefully the posterior part of

the chest, to see if air enters both lungs. If you find one lung seriously obstructed, I myself should advise against tracheotomy. If you find that air does not enter the lung beyond the bifurcation of the bronchus, tracheotomy will be useless. Still there are cases in which we have everything to hope if a cure can be effected. But at the same time we should consider the interests of surgery, and when I say the interests of surgery I mean the interests of the entire public, as well as those of the surgeon. If we perform the operation in a case almost entirely hopeless, we have to consider the effect produced upon the feelings of friends when a similar operation is to be performed in a similar case. The point which I wish to insist upon is, that if you perform tracheotomy you should do it directly it becomes necessary. You must not wait until the case becomes hopeless. If you do this, you will find that a large number of cases which appear hopeless will terminate in recovery. On the other hand, if you perform tracheotomy too early, you will perform it in a large number of cases which will recover without it. I think the very favorable statistics with regard to the operation, especially those furnished us from Parisian hospitals, are partly the result of the operation, being performed where it should not have been performed; that is, in cases of catarrhal laryngitis, slight cases of diphtheria. In this manner you can get the most favorable statistics, but it is not a fair procedure to perform tracheotomy before there are distinct signs of laryngeal dyspnœa.

Now, gentlemen, if you observe the directions which I have recommended, I do not think you will cure all cases of diphtheria, but I think you will meet with a certain amount of success, and I also think that you will be able to rescue many patients from imminent death.

ON THE TREATMENT OF ECZEMA OF THE HANDS.

By Arthur Van Harlingen, M.D.,

Professor of Diseases of the Skin in the Philadelphia Polyclinic.

Gentlemen,—The treatment of eczema of the hands must vary according to the locality and variety of the disease. That which is proper for acute eczema of the thin integument over the back of the hands would be useless if applied over the thickened epidermis of the palm, and what would be useful in chronic eczema of any part of the hand might be quite injurious in the acute form of the disease. In the following remarks I shall consider the management of each variety separately.

And, first, with regard to acute eczema of the backs of the hands and fingers. The skin here differs from that on other parts of the body chiefly, in its comparative delicacy and in its exposed position. The constant uses to which the hands are put in the ordinary labors of the household among women and in the various occupations and handicrafts of men lead to the exposure of the skin to numerous irritants. Cooks have their hands immersed in dough and salt water; maids and washerwomen are exposed to the action of hot water and soap in washing dishes and scrubbing; bricklayers plasterers, dyers, polishers, grocers, bakers, bartenders, all are exposed to moisture and the contact of irritating substances; and these occupations are chiefly apt to furnish cases of acute eczema of the hands. The appearance presented in acute eczema of the part under consideration has nothing distinctive about it. We have the small vesicles unbroken or broken with serous exudation, scratch marks, and crusts, or occasionally the red and weeping surface of eczema rubrum. The only disease liable to be confounded with this is scabies, where the lesions are often similar. Of course to treat a case successfully the diagnosis must be made with certainty. Scabies, presenting itself usually in various parts of the body simultaneously, and showing the peculiar burrows of the itch insect between the fingers or on the side of the hand, with a history of contagion, is the only disease with which eczema of the backs of the hands is liable to be confounded.

The treatment of acute eczema of the hands must be preventive as well as curative. The surface of the skin must be protected from air and water, and chiefly protected from the irritative agencies which so often have been the exciting causes of the disease. The baker must keep his hands from the dough, the washerwoman hers from the hot soap-suds. This is often no easy matter for those who are dependent upon their special handicraft for their daily bread. But without such abstention from the irritating cause the prospect of speedy recovery is poor and the prognosis must be to a certain extent unfavorable. Still much can be done in the way of protection. Gloves of leather or india-rubber may be worn; the latter, in particular, I often find of great use. Work-people imagine that they cannot manipulate while wearing rubber gloves; but it is surprising how the hands can accustom themselves to this covering. The chief difficulty is found in cases where the patient has to work in corrosive substances. Here some other means must be employed, and I think that if the hands are thoroughly anointed with some unctuous substance, as tallow, much can be done towards preventing the action of irritating substances upon them. A proper covering to protect the hands when exposed to irritants has not yet been devised, and is certainly much to be desired. Where only small areas of the skin are involved, the "liquor gutta-percha" of the Pharmacopœia, a solution of gutta-percha in chloroform often acts as a very efficient protector. The patient may be provided with an ounce-bottle of the solution, having a camel's hair brush in the cork, and may paint the affected part one or more times daily. The evaporation of the chloroform leaves a thin, impervious, and slightly elastic film of rubber.

As regards the more strictly medical management of these cases, the local treatment is by far the most important in the majority of cases, and I shall only speak incidentally of general therapeutic measures.

Acute eczema usually attacks the backs of the hands, the sides of the fingers, and the wrists, commonly leaving the palms unaffected. Its character here is not different in any essential particular from eczema of other parts. When very acute and severe it takes on the appearance of a dermatitis, especially if too stimulating or irritating remedies are first employed. Frequently a severe eczema of the backs of the hands begins insidiously by the formation of a few papulo-vesicles, and the patient thoughtlessly applies some quack ointment, with the result of aggravating the original disease to a marked degree. If the system chance to be in such a condition as to favor the occurrence of an outbreak of eczema, any irritant may act as a torch and light up the fire of a much more general eruption. In such cases the local treatment, to begin with, must be of a most soothing character. Dilute lead-water, or, where inflammation, discharge, and crusting, with much heat, are present, lead-water poultices form often the best application to begin with. The lead-water poultice is made by mixing dry bread-crumb with the dilute lead-water of the Pharmacopœia until a mass of proper consistency is made, and this is to be applied cold—often ice-cold is best—and frequently repeated.

When the violence of the inflammation has somewhat subsided, or when the affection has not been so acutely inflammatory, the application of cloths wet with lotio nigra is of advantage. In other cases the fluid extract of grindelia robust a serves a good purpose, as in the following wash:

℞ Ext. grindeliæ robustæ fluid., f ʒ ii–iv; Aquæ, Oi—.M.

Fiat lotio.

The cloths should be saturated with this wash and applied to the skin in such a manner as to allow evaporation to proceed until they are dry. The lotion is again applied to the cloths *in situ*, and then evaporation allowed to go on as before. I find this the best plan of employing this remedy, which I have used extensively in acute eczema for some years, and which almost invariably acts very happily. Now and then I come across a preparation which, owing, as I suppose, to some defect in the pharmaceutical manipulation of the extract, seems to have irritant qualities; but this happens so rarely that I retain great confidence in the valuable curative properties of grindelia.

Many cases of acute eczema of the hands get well under the use of a saturated solution of boracic acid, and this application is particularly useful where there are numerous vesicular lesions inclining to coalesce and break down into eczema rubrum.

In such forms of the disease it is also that the old and tried calamine and zinc wash frequently proves efficacious. It is composed as follows:

℞ Pulv. calaminis præp., ʒ iii;
Pulv. zinci oxidi, ʒ i–ʒ ii;
Glycerinæ, ʒ iii;
Aq. rosæ, ʒ iv.—M.

I have recently used with advantage a solution of sulphate of zinc in water:

℞ Zinci sulphat., ʒ ss;
Aquæ, Oi.—M.

This is by no means a new remedy, but is good enough to be kept in mind, especially in those acute but partly-developed cases where numerous incipient vesicles appear under the skin between the fingers and tending to spread over the back of the hand and wrist. It should be applied on cloths, which may be wetted every hour or so during the day and two or three times at night.

Among ointments, the "unguentum diachyli" of the Germans is the most valuable, when it can be had. It requires a skilled pharmaceutist to make it, and its preparation is very troublesome. When made very carefully it is extremely soothing; but if the olive oil which enters into its composition is not of the best, or if there should occur any carelessness in manipulation, it is very irritating. The following formula, to which my friend, Dr. Duhring, has called attention, is, I believe, the most satisfactory: one part of freshly precipitated (from acetate of lead) pure white hydro-oxide of lead is rubbed with two parts of water, and mixed well with six parts of the best Lucca olive oil. It should be stirred for about two hours over a hot-water bath near the boiling-point, and cooled with constant stirring until the proper consistence is obtained; while cooling a drachm of oil of lavender to the half-pound of ointment is added.

The diachylon ointment thus prepared is to be spread thickly on rags and applied to the affected parts. It should never be rubbed in with the finger, because the same effect cannot be gotten from it when applied in this way.

Ointments of oleate of zinc or oleate of bismuth may be of service in some cases of acute and subacute eczema. The ointment of oleate of bismuth is most conveniently prescribed according to the following formula:

℞ Bismuthi oxidi, ʒ i;
Acidi oleici, ℥ i;
Ceræ albæ, ʒ iii,
Vaselini, ʒ ix;
Ol. rosæ, ℥ ii.—M.

This very elegant pharmaceutical preparation was first suggested by Dr. McCall Anderson, several years ago, and it is a most useful remedy in eczema of whatever locality, but its action is particularly satisfactory in eczema of the hands.

Other ointments suitable in the subacute forms of eczema of the hands are the mild mercurial preparations. One which I have employed in many cases with most satisfactory result is the ointment of calomel and zinc:

℞. Hydrag. chlor. mite, gr. x-xxx ;
Ung. zinci oxidi, ℥ i.—M.

Ointments of ammoniated mercury, and, in the more chronic forms of the disease, of the red oxide of mercury, may also at times be employed with advantage.

Eczema of the palms is usually of a chronic character, and the treatment quite different from that which has been described as appropriate to the disease as found on the backs of the hands or on the fingers. The disease is not likely to be mistaken for any other affection except the palmar syphiloderm. This, however, it does closely resemble in many instances. Whensigns of syphilitic disease exist elsewhere, or when the eruption runs up from the palm towards the wrist, some characteristic features of syphilis are apt to present themselves, so as to render the character of the palmar trouble unmistakable. But when we are forced to form an opinion from the eruption on the palm alone, this is sometimes quite difficult. Usually the lesion of eczema are characterized by diffuse irregular patches of thickened epidermis, with fissures here and there and jagged outlines. The syphilitic eruption, on the other hand, is characterized by deeper infiltration, with less epithelial thickening and scaliness. Moreover, the lesions, if carefully examined, will almost always be found made up of rounded patches, single or coalesced. It is, in fact, a papular eruption concealed by the thickness of the epiderm. Itching may or may not be present in either case, and I do not know what other sign can be given as distinctive of the two affections when the palm alone is affected. Proper treatment quickly affects the syphilitic affection, while eczema of the palm is terribly intractable.

The diagnosis being made, however, we must remember that when eczema of the hands presents itself in the chronic forms so often met with, the treatment given as suitable for the acute and subacute varieties is useless and quite out of place. The remedies here required are, first, such as will soften and remove the redundant epidermis, and, second, those calculated to remove the infiltration of the cutaneous tissues.

Among the former, maceration by hot water applications, and by rubber bandages and gloves, may be mentioned. The hands, or the palms alone, if these are the parts chiefly affected, may be soaked in water as hot as can be borne for some minutes before the stimulant applications to be described are applied. This softens the horny outside layers of the skin, and renders them infinitely more penetrable to various agents than they would otherwise be.

Rubber bandages and especially rubber gloves, are to be highly recommended for the same purpose. They should be worn continuously for some days, being turned inside out and cleansed with cold water every day, while the hands are wiped on a dry towel. Under the use of the rubber, eczematous hands covered with horny epidermis become softened so as to permit the employment of ointments, which would be perfectly useless were they applied prematurely. The rubber applications themselves are only rarely curative. Though the disease may seem at times to have been entirely removed by their use, it quickly returns when they are removed. If it is borne in mind that the rubber applications are only preparative in their action, much disappointment will be avoided.

Alkalies in various forms are very efficient agents in macerating the epidermis. The saponis viridis, or "Hebra's green soap," a soft soap containing an excess of potash, is a very good preparatory application. It may be rubbed into the indurated patches with a bit of flannel, with the addition of a few drops of water, or it may in some cases be applied in the form of a poultice spread thinly on rags, and kept in position until the epidermis becomes softened. Sometimes solutions of potassa—ten to thirty grains to the ounce—may be used with good effect. If the weaker solution is employed, the patient himself may apply it with the aid of a rag or a stick, rubbing the solution into the affected parts until a feeling of warmth is produced, and then washing it off with pure water. The stronger solution should be employed by the physician himself, and a good deal of friction may be used, care being taken to confine the action of the remedy to the indurated tissues. What is wanted is to soften the hard tissues ; and the effect of the potassa may be heightened if the part affected is soaked for a little time in hot water to soften the tissues. The potassa then takes hold more rapidly.

Recently I have been using a solution of papain, a substance which exercises a sort of digestive influence on the epidermis, and which has served a good purpose in some cases of horny, indurated palmar eczema by preparing the way for other remedies. The following formula may be employed :

℞ Papain., gr. xii ;
Pulv. sodii bi-borat., gr. v ;
Aquæ, ℥ ij.—M.

Paint on the part twice daily.

Having softened as far as possible the induration and callousness which are characteristic of chronic eczema of the palm, further applications may be made. Of those apt to be of use, the tarry and mercurial preparations are prominent. Tar ointments of various strength, containing from one drachm of tar to the ounce up to the officinal tar ointment of the Pharmacopœia, may be employed. Solutions containing tar, as the "Liquor picis alkalinus,"—

℞ Picis liquidæ,
Potassæ causticæ, a a ℥ i ;
Aquæ ad ℥ i.—M.,—

or the preparation know as "Liquor carbonis detergens," may be used in a diluted form, say beginning at one part to four of water, and gradually increasing the strength.

Another tarry preparation may be mentioned, the "Tinctura saponis cum pice;" it is made by dissolving tar and sapo mollis, or "green soap," in alcohol, equal parts of each of the three ingredients being taken.

The application of this remedy may be followed by that of the unguentum diachyli above described. In fact, the fingers and hands should always be wrapped up in ointments after the application of any of the remedies of a tarry and caustic character, or of those intended to macerate the epidermis. A good ointment to use after these washes is the following:

℞ Hydrarg. ammoniat., gr. v;
Zinci oxidi, ʒ iii;
Ung. picis U.S.P., ʒ iv;
Ung. aq. rosæ, ʒ vii;
Vaselini, ℥ iss.—M.

Rags or narrow bandages should be smeared thickly with this ointment, which is to be kept in contact with the skin continuously, being removed only when the tarry and caustic applications are made, or when used alone the ointment may be simply wiped off every evening, and a new application may be made immediately.

Two other forms of treatment remain to be described,—blistering and the application of plasters. The former plan is chiefly to be put in practice when the eruption is situated on the backs of the hands or on the fingers; it is performed by simply painting the parts with cantharidal collodion, and dressing the blister with one of the milder ointments. The other procedure is occasionally of use in cases where the palmar surface is thickly covered with dry horny epidermis. It consists in keeping the following ointment applied on narrow strips of muslin constantly in apposition to the surface:

℞ Hydrargyri vivi. gr. c;
Terebinthinæ, gr. c;
Emplast. plumbi, gr. ccl;
Resinæ pini, gr. l,—M.

This should be kept in contact day and night for a considerable period. As it is very tenacious, it rarely requires to be changed.

Finally, the fissures which occasionally occur in eczema, particularly about the fingers, are to be treated by long-continued soaking in hot water, followed by the application of a fine pencil of nitrate of silver in each fissure, and then wrapping up in one of the ointments described.

Constitutional treatment is rarely of use in chronic eczema of the fingers, though arsenic is occasionally found to do good. The acute varieties of eczema are to be treated like the same disease elsewhere. In any case a chronic affection, the prognosis of eczema of the hands should always be guarded. Some cases resist all treatment stubbornly.—*Phil. Medical Times.*

EXCESSIVE SWEATING OF HANDS.

For this annoying condition, Dr. F. H. Alderson says in the *Lancet*, July 28, 1883:

"The patient should soak her hands night and morning in warm water, in which should be dissolved about two drachms or half an ounce of the chloride of ammonium, and about twice as much carbonate of soda (crystals), enough water to be used to well cover the hands. I generally prescribe for my patients sufficient for six applications; and, as skins vary in tenderness, tell them to use as much as will temporarily, to a slight extent, cause the wrinkling known as cutis anserina, a condition which I describe to them as looking like the hands of a washerwoman. After well bathing, the hands are to be well rubbed with the following embrocation; Tincture of iodine one drachm, compound camphor liniment and glycerine of each a drachm and a-half, and compound liniment of belladonna one ounce. (If for the hands, a drachm of eau de Cologne makes the embrocation more agreeable.) The embrocation to be applied twice a day. A cure quickly follows. This treatment is equally appropriate and successful for excessive sweating and even bad-smelling feet, for that odor is due to the excessive function of the sudoriparous glands."

HABITUAL CONSTIPATION.

J. Mortimer Granville advises the following in constipation dependent upon a lax and torpid condition of the muscular coat of the alimentary canal, a loss of the reflex contractility that is natural and necessary to proper action:

℞. Sodæ valerianatis.....grs. xxxvj.
Tr. nucis vomicæ..... ʒ j.
Tr. capsici.....m. xlviij.
Syr. aurantii..... ℥ iss.
Aquæ.....q. s. ad ℥ vj.

M. Sig. A tablespoonful three times a day a half hour before meals.

When there is constipation depending on a deficiency of glandular secretions generally throughout the intestine, manifested by a peculiar dry and earthy character of the dejecta when the bowels *do* act, he gives something like this:

℞. Aluminis..... ʒ iij.
Tr. quassiæ..... ℥ j.
Infus. quassiæ ..... ℥ vij.

M. Sig. Take two tablespoonfuls three times a day after meals.

When constipation is due to the interruption of the *habit* of a daily evacuation of the bowels, he often prescribes the following with satisfactory results:

℞. Ammoniæ carbonatis..... ʒ j.
Tr. valerianæ..... ℥ j.
Aquæ camphoræ..... ℥ v

M. Sig. Two tablespoonfuls to be taken in the morning immediately on rising.

It is, as a rule, neither necessary nor desirable to continue it for a longer time than a fortnight.—*Brit. Med. Jour.*

THE CANADA MEDICAL RECORD.
A Monthly Journal of Medicine and Surgery.
EDITORS:
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SUBSCRIPTION TWO DOLLARS PER ANNUM.

All communications and Exchanges must be addressed to the Editors, Drawer 356, Post Office, Montreal.

MONTREAL, OCTOBER, 1883.

OPENING OF THE MEDICAL SCHOOLS.

MONTREAL.

McGill Faculty of Medicine opened Oct. 2nd, with an introductory lecture by the Venerable Dr. Joseph Workman, with one exception the oldest living graduate of the school. The lecture was followed by a conversazione in the Peter Redpath Museum, which was largely attended. In numbers, so far as we can learn, the class is larger than last year.

Bishop's College Faculty of Medicine had no introductory, but set off at once to real work. The Freshman class is the largest this school has had since its organization.

Laval University (Montreal branch) had no special introductory lecture, but began work at once.

Montreal School of Medicine and Surgery (Victoria College) opened with unusual *eclat*, in consequence of its sudden resussitation, when almost at its last gasp. The attendance of students is very large. Dr. d'Orsonnens gave the introductory lecture, in the course of which he said, "This meeting of the Montreal School of Medicine is certainly its most glorious day, for the school, threatened in its very existence, nay thunder-struck, I should rather say, but a few weeks ago, and apparently lost forever in the eyes of every one, is seen again by its friends, in this the opening day of its lecture, more renowned and more brilliant than ever, and with a still greater chance of success for the future."

TORONTO SCHOOLS.

The Toronto School of Medicine and Trinity College opened with very large classes. The new Female College also opened under favorable auspices.

KINGSTON SCHOOLS.

The Royal College of Physicians and Surgeons opened their regular course with a fair complement of students. The Women's Medical College of Kingston, the outcome of last year's troubles, is in full work. The lectures are the same as those delivered at the Royal College, and the Professors of both schools are the same.

WESTERN (LONDON) UNIVERSITY.

The second session of this school opened on October 1st by Dr. Maurice H. Burke giving an opening lecture. We have not seen anything stated about the attendance.

QUEBEC.

Laval University opened at the usual time. The death of its Dean, Dr. Jas. A. Sewell, cast a gloom over the opening.

HALIFAX, N.S.

The Halifax Medical School continues to do good work, and opened its doors with a fair list of students.

MONTREAL SCHOOL OF PHARMACY.

This school held its introductory services in their rooms, McGill St., on the evening of the 3rd of October, the President of the Pharmaceutical Association, being in the chair. The attendance of students was large, and they listened with much attention to an address from Dr. F. W. Campbell, the Dean of Bishop's College Faculty of Medicine. Brief addresses were also delivered by Dr. Reed and Mr. Manson. This Association has done a great deal to elevate pharmacy in this Province, and it deserves liberal support.

DIO LEWIS'S MONTHLY.

Dio Lewis is a name well known in the United States among all who are interested in athletics and sanitary matters. Three months ago he entered the field of journalism, and is now issuing a monthly periodical which contains a large amount of interesting matter, much of it being of practical value in the direction in which he has devoted his life. The October number is particularly rich in material. "Our Young Women," by the Rev. Dr. Crosby, is a brave discussion of an enormous but fashionable evil—in fact all its articles are interesting, some exceedingly so. It is published by Frank Seaman, 68 Bible House, New York.

OUR LITTLE ONES AND THE NURSERY.

This is the name of a really very elegant little monthly, for young children, which is published

by the Russell Publishing Company of Boston. It is profusely and beautifully illustrated, and is sure to become a welcome visitor to those to whom a new world is opening, as they learn to read. It is published at $1.50 a year, but any medical man who wishes to introduce it into his family can have it by sending us *one dollar*.

PERSONAL.

We chronicle with very deep regret the very serious illness of Dr. Kennedy, one of our assistant editors, and Professor of Midwifery in Bishop's College. Just about a year ago, he was laid up for some time with pleura-pneumonia of the right side. The same disease has again attacked the left side. He is attended by his colleagues, Drs. Campbell, Perrigo and Cameron, and his friend, Dr. Howard, has seen him in consultation. As we go to press there are signs of improvement, and we hope they will be permanent.

Dr. J. A. Grant, of Ottawa, who, during the entire period of the sojourn of the Marquis of Lorne and Princess Louise, in Ottawa, filled the position of Vice-Regal Medical attendant (as he has done during several previous terms), was, just prior to their departure, the recipient of elegant mementoes from Her Royal Highness' own hand. That presented to Dr. Grant was an elegant dispatch box, while Mrs. Grant received a handsome candelebra. This was but the just recognition of very valuable services rendered. Dr. Grant has filled this honorable position for many years, in a manner worthy of the extended reputation which he bears, and we learn with pleasure that he is still to continue to occupy it.

Dr. McCrimmon (M.D., McGill), Lucknow, Ont., left for Edinburgh on the 24th inst. He intends being absent a year, and will visit in addition to the Scottish capital, London, Paris and Vienna.

Dr. Robert H. Wilson (C.M., M.D., Bishop's, 1880) has, at the request of a large number of the residents, commenced practice at Hemmingford, P.Q.

Dr. James Ogilvie, of Jamaica, W. I., has been paying Montreal quite an extended visit.

Dr. Merrill has been appointed a physician to the Hotel Dieu Hospital, Montreal.

Dr. Wm. Stephen (M.D., McGill, 1880), Montreal, has gone to Europe.

Dr. Hudon, of Riviere du Loup (en bas), was in Montreal the end of September.

Dr. Oliver, late 60th Rifles and then Brigade Surgeon, has retired from the service and settled in Toronto.

Dr. R. P. Howard (Dean) and Dr. Osler represented McGill Faculty of Medicine, and Dr. F. W. Campbell (Dean) represented Bishop's College Faculty of Medicine at the centennial celebration of Harvard Medical school, at Boston, on the 17th October.

Dr. R. A. Kennedy has been appointed a Medical Examiner for the New York Life Insurance Company, in place of the late Dr. David. This Company has just resumed business in Canada.

THE LATE DR. J. A. SEWELL.

QUEBEC.

At a good age, yet almost in the active exercise of his professional abilities, Dr. James A. Sewell has passed from among us, his death having occurred at his residence in Quebec on the 28th of September last, the result of senile gangrene of the foot. Dr. Sewell was one of the oldest medical practitioners in Quebec, and for many years has stood deservedly at the head of his profession. He was born in 1810 in that city, and received there his early education, graduating in medicine at Edinburgh, where he received his diploma in 1833. For half a century the deceased gentleman has practised his profession in the Ancient Capital. During the troubles of 1837-38 he was attached to the Royal Volunteer Artillery. Dr. Sewell has been Professor and Dean of the Faculty of Medicine in Laval University since its establishment, and continued his lectures in that institution without intermission up to the date of his late illness. He has been for forty-three years past one of the visiting physicians of the Hotel Dieu, and for over thirty years chairman of the Marine Hospital Commission. He was also a Governor of the College of Physicians and Surgeons of the Province of Quebec, of which he was a former vice-president. He was an ex-president of the Canada Medical Association and of the Quebec Medical Society. Deceased was an M. A. of Bishop's College, Lennoxville. Most of the younger medical practitioners of this city have followed the lectures of the deceased physician, and in cases of difficulty in their every-day practice he was often consulted by them, and was ever ready to assist them with his learning and experience.

THE CANADA MEDICAL RECORD.

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A REMARKABLE CASE IN OBSTETRIC PRACTICE.

By T. A. RODGER, M.D., Chief Medical Officer Grand Trunk Railway.

Read before the Medico-Chirurgical Society, Oct. 23rd, 1883.

The case which I purpose bringing to your notice to-night is one which has recently occurred in my obstetric practice, and as it presents to my mind one or two rather unusual features I thought I should like to hear an opinion expressed upon it by the members present. Though a great deal of the work of an Obstetrician must necessarily be of a routine character, still, nevertheless, occasionally, there are to be found cases which arrest attention and relieve that monotony.

Such an one came into my hands on the tenth of October, the patient, aged 32 years, being pregnant for the fourth time. I was present at the birth of all the former children, and found nothing unusual. The history of the case, which is brief, is as follows. On the morning of the tenth of October I was requested to visit a Mrs. L., whom it was said had been ill all night with great difficulty of breathing. I found the patient in bed, half sitting, half reclining on her side, and propped up with pillows. Her countenance was somewhat anxious, face slightly livid, eyes staring, breathing very hurried and short, and complaining of great tightness about the chest and abdomen, with a sense of suffocation.

This being my first visit to this patient at this time, and not thinking that she was pregnant, I at once examined her chest, found heart and lungs normal, but was struck with the size of the abdomen. Her feet and legs were somewhat œdematous, but no great amount of swelling at the vulva. There had been slight pains at long intervals all night, but the patient said "not like labor pains," though she thought that she ought to have been confined some time during the month of September, having, as far as she can recollect, menstruated for the last time about the beginning of the year.

The size of the abdomen being so much out of proportion to any thing I had ever witnessed before, I began questioning as to her condition for some time back.

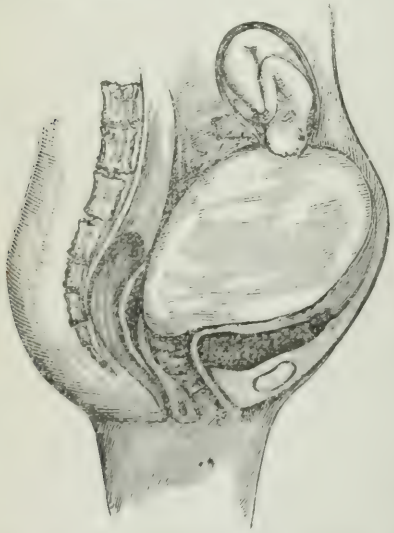
She told me that nothing out of the way was noticeable in the size of her abdomen until between the sixth and seventh month; that never at any time could she say that she felt any distinct movement of the child, such as experienced with her other children; that she had suffered considerable at different times from irritability of the stomach, in fact, had often great difficulty in retaining food. A vaginal examination revealed the os to be high up, dilated about an inch, edges tense but thin, membranes entire,

but no presentation could now be felt. Examination of the abdomen gave dullness on percussion throughout; no movement nor outline of the fœtus could be made out, and by auscultation could not get either heart sounds or placenta bruit.

Through the assistance of the friends present I changed the position of the patient to one which I thought more favorable, or which might assist me in detecting a presentation, but all without any effect whatever.

The distress of the patient being so great I felt that some measures would require to be adopted at once for relief, so I gently dilated the os until I succeeded in passing the greater portion of my four fingers within the uterus, taking care at this point not to tear the membranes, still no fœtus could be felt. Satisfying myself as to the toughness of the membrane, I passed my whole hand between the latter and the walls of the uterus and endeavored to rupture the membranes with my fingers, but failed. Without withdrawing my hand, I passed, with the left, a knitting-needle, when the rush of water was tremendous.

Continuing my search for the child, my arm acting as a plug in the vagina, I could find nothing in the uterus proper, having passed my hand all around the walls; but, at the upper end or fundus, a circular opening about the size of a silver dollar, edges somewhat thick, and unyielding to ordinary force by the fingers.



Passing my forefinger through the new opening, touched the mouth, nose and eyes of the child; then gradually succeeded in getting in a second finger when no forehead could be felt, in fact, no head.

With the gradual escape of some portion of the amniotic fluid I found that I could use more force with my fingers in dilating, due to this second uterus, if I may so call it, being brought near to my hand. Owing to the alarming condition of the patient at this point, and fearing delay might not serve any good purpose, especially if the escape of the amniotic fluid was permitted, there being a possibility of collapse, I determined at once upon version and set to work to force my hand into the interior. After considerable resistance had been overcome, both feet of the fœtus were grasped, completing the delivery of a still-born acephalic male child, weighing about six pounds. Fluid Ext. ergot was given to ensure uterine contraction, and after delay of a short time the placenta came away by gentle traction with the hand, followed by slight hæmorrhage.

The woman was not in a condition to warrant further interference, otherwise I should have liked to have passed my hand and further investigated the interior of the uterus, but feared that possibly such procedure might be attended with bad result.

This is now the 16th day since the patient was confined, and I may state that she is doing well, no bad symptoms having appeared, so far, in the case.

I have had sketched upon the blackboard now before you a rough outline showing the relative position of the cavity containing the fœtus to that of the uterus so enormously distended with amniotic fluid; and this now appears, engraved to illustrate the article.

SOME REMARKS ON DIVISION OF LABOR AND THE ETIOLOGY OF DISEASE.

By Henry Howard, M.R.C.S.L., Eng., Government visiting Physician Longue Point Lunatic Asylum, Province of Quebec.

Read before the Montreal Medico-Chirurgical Society, October 26th, 1883.

Mr. President and Gentlemen,—My reasons for not having read a paper before this Society for over two years were: first, I felt that my papers were not sufficiently practical for a Medico-Chirurgical Society; secondly, I preferred to hear the views of others to giving my own, more particularly so, as being a specialist for twenty-three years, I felt the possible danger there was of running into one course of thinking, and becoming dogmatical in my views on some particular subject, to the exclusion of others; indeed

I find that one gentleman, a very "Daniel come to judgment, has broadly accused me of dogmatism, while he himself was writing in the most dogmatic style, rushing wildly against all theories, believing he was demolishing all opinions by misrepresentation, boldly assuming the position, "I have spoken, let no dog bark," sweeping out low temperature, and ophthalmoscopic observations with one stroke of his pen.

The generous and hearty call made upon me, at the suggestion of my friend, Dr. Hingston, by the President and members of the Society at our last meeting, for a paper, encouraged me to write this one, which, for want of a better name, I have given the title of: Remarks on Division of Labor and the Etiology of Disease. Gentlemen, time works wonders, or, more properly speaking, nature, even though she takes time, works wonders by her laws, and in nothing is this more remarkable than the wonderful changes she produces in public opinion by the law of evolution. Nature is all in motion, she moves, and we, as an integral part of nature, must move with her,—we cannot help ourselves, onward we must go.

I remember well the time when, in this good city of Montreal, a medical man could not adopt a more certain course to get his professional brethren in arms against him than by selecting some specialty to which he would devote his time, and whatever talents he possessed. But what have we now? We have the profession recognizing the great natural law, division of labor, so that nine out of every ten of our medical men, no matter how clever they may be as general practitioners, take up some particular specialty, and upon this specialty the profession and the public look upon them as an authority. Now this division of labor it is that accounts for the rapid strides made in medical knowledge within the last quarter of a century, and this division of labor, I am happy to say, is not confined to our profession. Its necessity has been recognized by the agricultural, the mechanical, the commercial and trading classes,—and see the wonderful effects it has produced upon one, and all of these classes, and, consequently, upon our whole social system. Division of labor has given men time to think and reason, and a social evolution has been the result. I suppose that in the present day there are to be found but few intelligent men in the medical profession who do not recognise as a fact that, for all physical phenomena there must be physical cause.

We may not yet know what is substance, and perhaps we never will. We may not be even able to define matter in the abstract, and only know matter in the concrete by their properties and qualities, and from these to learn that all the worlds are matter; that the mineral, vegetable and animal kingdoms are matter; that matter is one, only differing in degree, and not in kind; and that matter, though changeable, is indestructible. By the properties and qualities of these concretes we know that all the phenomena we take cognisance of are physical phenomena, or are known to us only through material sources. We know that life in all its degrees, from potentiality in the germ to the biotic life in man, is only known to us as a physical phenomena; even what we call death is a physical phenomena—mind, thought, desire, emotions, impulses, and will, we only know as physical phenomena. All of nature's forces, whether recognised as chemical, mechanical, or physical motion, we only know as the phenomena of matter. In fact, all we know, or can treat of, is of the natural order, and materialistic. Guided by these facts the physical scientist has learned wherever he finds physical phenomena to look for the physical cause which has produced the physical effect; and he has found that all physical phenomena are dependent for their characteristics upon the physiology of the matter from whence the phenomena proceeds. Take the science of psychology, for an example, where we find, that all psychological phenomena is what the physiology of the mental organization makes it. If the phenomena be bad the physical organization is bad, it is either teratological or pathological, which affects its physiology; on the other hand, if the psychical phenomena be good it is because the mental organism is physiologically good, normal not abnormal,—so when we speak of a sane man we speak of a man with a normal physiological psychosis, and of an insane man we speak of a man with an abnormal physiological psychosis. Moreover we find that morphological analogies implies physiological analogies.

Now, by similar observations and the same mode of reasoning, we come to diagnose all diseases of the human frame. We find certain physical symptoms or phenomena, and we look for physical cause,—we look for abnormal physiology of parts, that is, we look for pathological defect to account for the physical symptoms or phenomena that present themselves. The pheno-

mena, then, of animal matter naturally leads us to search for physical cause, which we find in the physiology of matter. But this is not sufficient, we must also find the etiology, which renders animal tissues physiologically normal or abnormal, as the case may be; until we have accomplished this wished-for end, we cannot claim that the practice of medicine is based upon truly scientific principles. Unfortunately the science of etiology has not kept pace with physiology; yet within the last quarter of a century histologists have done wonders in their field of labor. To them we are indebted for all the knowledge we possess of etiology, whether of the vegetable or animal organisms. To the histologist are we indebted for the knowledge of what a parasitic world is this world of ours, that it is a truth, that:

"Great fleas have little fleas and other fleas to bite them,
And little fleas have other fleas, and so on ad infinitum."

We owe to the histologist the knowledge that the beginning of animal and vegetable life is the beginning of what we call death; that all that lives is like the "gourd of Jonah," having a worm at its root,—so that death or physical change is natural to all organisms; decay is matter, not in an abnormal, but normal, state. But death of organisms from disease is unnatural, and mankind seems to have recognised that fact since we have had a history of man, and felt it to be the greatest of all evils.

If we have found the pathology of vegetable and animal organisms explained by the germ theory—and to me it appears we have—for this knowledge we are indebted to the labors of the histologist. We may not have found it however, therefore we should follow the advice of Mr. Huxley, and avoid speaking "cock-surely" of all such questions. But if there is any new theory in the present day that seems to have taken firm hold of the conviction of medical men it has been the germ theory.

Strange that nearly every scientific truth should have its origin amongst those not learned in book-lore. Long before Mr. Tyndall commenced his investigations of atmospheric air, the peasants of Ireland had some undefined idea of an *atmospheric materies morbi*, evident from the fact that in times of epidemics, they used to make large bonfires to arrest the progress of the epidemic. And I find that our respected and learned friend, Dr. Workman, in his reminiscences of the cholera in Montreal, in 1832, states that cannons were fired in all the streets (to the great benefit of the glaziers) and tar barrels were burned. Now, although we do not find any benefit to have arisen from these acts, they are a proof that, in the minds of the actors, there was, as I have said, some undefined idea of an *atmospheric materies morbi*—a germ which only required the genius of a Tyndall or a Pasteur to interpret, and nobly have these men done their work.

For the knowledge we have of the etiology of disease we are indebted to the labors of the histologist, and those diseases we do not know the etiology of—for the sake of our patients—the sooner we know it the better; but to attain to this knowledge it is actually necessary that we should be convinced of the fact that, for every phenomena we observe in nature there must be physical cause,—more particularly must we recognize this great truth when treating of the animal economy, as we find it in man, remembering that conduct, whatever it may be, is only a symptom or phenomena, having a physical cause, although our histologists may not yet be able to show us physiological or etiological cause for effect. You may say to me: suppose we know the physiology of all matter and the pathology and etiology of all diseases, what then; would we be the better able to cure disease or find a remedy for the removal of these diseases? Well, whatever chance we may have when we come to obtain this knowledge, we can do but very little without it. When that time comes, however, I believe the pharmacologist will find the remedy for the disease. I agree with that eminent physicist, Mr. Huxley, when he says: "It will, in short, become possible to introduce into the economy a molecular mechanism which, like a very cunningly-contrived torpedo, shall find its way to some particular group of living elements, and cause an explosion among them, leaving the rest untouched." No wonder that such a man would come to such a conclusion when he so ably and truly describes man,—his words are: "the body is a machine of the nature of an army, each cell is a soldier, an organ a brigade, the central nervous system head-quarters and field telegraph, the alimentary and circulating system the commissariat."

A few words on my own specialty, mania or pathological psychology, for it is pathological psychology, although we are not yet able to show, in the majority of cases, what

is the pathological defect of matter which developes the phenomena, mania, in its different degrees. But, judging from observation, I believe the time is rapidly approaching when our pathological anatomists and histologists will be able to show us the very nerve lesion which causes mania--whether that lesion be due to mechanical injury from a germ or molecule or from a chemical atom; or, if so be, that there is no actual lesion but some abnormal chemical change.

My hopes are very strong, because I see some of our very ablest young men devoting their time and talents to morphological and histological research; to these gentlemen I would say what my friend Dr. Workman once said to me, "*festina lente.*" To those histologists and morphologists, more particularly our own, who are already famous for their researches, I would say: "remember, gentlemen, how ignorant we yet are of these sciences, and indeed of all physical science, and persevere in your good work, till we have light, where there is now such darkness. Let others treat of the supernatural, our work is with nature and her laws." I have been led to make these few remarks to the Society because from my observations for many years of the insane and criminal classes of society. I feel convinced that all our thoughts, words and deeds are physical phenomena, to be accounted for by the physiology of matters, and in the words of LUYS: "That the labor of life is an incessant struggle between the acts of consciences, volition and the automatic impulses of the emotional regions of our being."

In conclusion, sir, I take this opportunity of congratulating the public at large, but more particularly the members of the medical profession, upon the new Anatomy Act. It has been, and will prove to be, a great boon to science, and the Government that granted us that boon is deserving of our deepest gratitude. Now there will be at least a possibility of learning both normal and pathological anatomy, and the public will be the gainers thereby, and in time the public will learn to be thankful. The Anatomy Bill, at least, was scientific legislation, based upon the natural law of humanity.

Society Proceedings.

MEDICAL CHIRURGICAL SOCIETY OF MONTREAL.

Meeting held Oct. 26, 1883.

Maggots in the Ear.—DR. OSLER exhibited for Drs. McLean and Duncan of Fergus Falls, Minn., five larvæ of *Muscida lucilia* which were removed, with sixteen others (all alive) from ear of a man aged 24. The patient consulted the doctors on August 14th, with intolerable ear-ache, which had begun on the 12th. He had had scarlet fever and measles when young, and there possibly had been otorrhœa, but he had not noticed any special discharge. On examining the left ear the meatus was found alive with maggots, which had to be picked out with the ear forceps, as syringing had little or no effect. There was bleeding from the wall of the meatus, the drum was absent, and there evidently had been old middle-ear disease.

Dr. Osler remarked that many such cases were on record, but the large number of larvæ in one was remarkable. They are invariably in connection with suppurative disease of the ear.

Aneurism of Abdominal Artery and Superior Mesenteric Artery. The patient, aged 49, a printer by trade, had been brought before the clinical class in the summer session on two occasions. He presented a large aneurism in epigastric region, which projected as a prominent tumor and had considerable mobility. The only symptoms were pain in the back and loins and distress after eating. Had noticed the pulsation for a year, the tumor for only two months. Palpation revealed a curious sausage-like projection from the main tumor, freely movable, and feeling like a dilated vessel.

Death took place suddenly from rupture of the sac into the peritoneum.

Dr. Trenholme. also exhibited a pair of ovaries and tubes removed about ten days ago from a patient in St. Catharines. This being his *sixth* successful case, in succession since May last. The ovaries appear to be healthy, but both tubes have been the seat of salpingitis, and are considerably diseased. The patient, æt. 28, has always had more or less suffering at menstruation. About five years ago sufferings increased, and were accompanied by general nervous depression and weakness, suffering especially in her head. About three years ago was under treatment for anteflexion and stenosis, which were relieved, but the treatment greatly intensified her head troubles and general nervous exhaustion. Since that period has been constantly an invalid, often not being able to see even her friends, or hear any conversation, remaining in her room alone; slept badly, and often had what she describes as "wave after wave of nervousness," and felt as though she was going mad. The operation was undertaken more with a view to relieve the nerve symptoms than for any pelvic suffering, and so far the patient has made a rapid recovery from the

operation, and declares she feels better than before. Dr. Osler takes the specimens to report upon at the next meeting.

Dr. TRENHOLME exhibited a small body, sausage-shaped about 3 in. long, 1 in. diameter, somewhat dense structure, and apparently having a capsule which had been passed by a patient with the following history: A man, æt. 50, hard drinker, was taken ill with severe vomiting and pains in the stomach and abdomen. Pulse quick, but no elevation of temperature. Bowels constipated, urine very high-colored and scanty. External and internal treatment failed to give entire relief, and though the bowels were freely opened by purgatives, and the pain alleviated by sedatives, yet the vomiting continued for several days, copiously and of a decidedly stercoraceous character. These severe symptoms abated, but still there was occasional vomiting, accompanied by severe colicky pains and great distension of the abdomen. About ten days from the onset of his illness, while defecating, he passed the body now exhibited.

The nature of this growth or body is not very apparent to the eye or touch, possibly an organized blood clot or an enlarged gland. Perhaps Dr. Osler, who has it in charge, will give us more definite information as to its nature at the next meeting.

Dr. HOWARD read a paper on the Division of labor which will be found under the head of original communications.

Several members spoke approvingly of the new Anatomy Act, and it was suggested that our Society should let the Government know that we would support them against the threatened serious opposition to this Act, which is now being agitated chiefly by political dodgers. Others of the members thought the less done the better, as the opposition would die a natural death.

Dr. ROGERS, (President) read a paper on a "Remarkable Case in Obstetric Practice," which will be found among our "Original Communications."

Dr. TRENHOLME remarked, with regard to Dr. Rogers' most interesting case, that the position of the opening being at the "upper part of the fundus," the possibility of tubal or utero-utubal gestation in any of its forms, was excluded. Had it been tubal or tubo-uterine, the opening would have at least not more than 4-5ths. of the distance from the os to the fundus. It was also impossible that the opening leading from the large cavity containing the waters to that in which the fœtus and placenta were, could be a pathological operation, as it was readily dilated, turning easily effected, the fœtus and placenta removed and "good contraction" secured. Hence it must be simply an hour-glass contraction of a uterus containing a fœtus dead for over three months and accompanied by this immense quantity of amniotic fluid. This view is still further strengthened by the fact that the uterine decidua and that of the cavity containing the child *were continuous and one* throughout, there being no membranes to puncture over the aperture where the face of the child presented. The case is a most interesting one and happily conducted to a successful issue.

Dr. SHEPHERD was of the opinion that it was a case of tubal pregnancy.

Dr. RODGER thought it was a case of hour-glass contraction, but yet thought there was nothing to preclude its being tubal pregnancy.

Dr. CAMPBELL mentioned a case where serious symptoms followed the taking of a three-drop dose of a 1 per cent. solution of nitroglycerine by a patient suffering from angina and advanced mitral disease. Three drops were taken instead of one, as prescribed, in the hope that more benefit would be gained. Shortly after swallowing the three drops a rash like that of scarlet fever came out, particularly on the chest. This disappeared in five or six hours. The tongue was dry, and in twenty-four hours he passed five times his usual amount of urine. The heart beat quickly, but there was no rise of temperature.

Dr. H. HOWARD said this agreed with his theory that the blood had nothing to do with rise or fall of temperature, which was alone influenced by the nervous system.

Dr. CAMPBELL also spoke of the continued success he is having with nitroglycerine in epilepsy.

Dr. CAMERON mentioned that he had three cases of *petit mal* where he was using it, so far with decided benefit in only one case.

Dr. REED brought up the matter of "Collective Investigation of Diseases," and urged the Society to follow out a plan similar to that adopted by the British Medical Association.

Several members spoke in favor of Dr. Reed's proposal, after which Dr. Hingston proposed that Drs. Reed, Osler and Cameron be named a committee to draw up the necessary questions, etc., with reference to the investigation of enteric fever. Carried unanimously.

Progress of Medical Science.

NATURE AND TREATMENT OF ASTHMA.

The majority of authors now believe that the phenomena of asthma are dependent upon spastic contraction of the muscles of the bronchial tubes. Although many other theories have had, and some still have, able supporters, yet the weight of authority favors by great odds the spasm theory, as affording the most rational explanation concerning the nature of true and uncomplicated asthma. It is not at all surprising that many vague and erroneous notions should be entertained with regard to the essential nature of sthma, since death from the disease is rare, and there being, therefore, few opportunities for post mortem examination. Even in asthmatic persons who have died from some other disease there is usually found no appreciable morbid change in the lungs, or indeed anywhere else, to account for the asthmatic phenomena.

The pathological condition of asthma, whatever it may be, must be sought for in the nervous system, for the affection is peculiarly nervous in its origin. Irritation of the vagus nerve, either at its origin or along its course, will occasion bronchial spasm. Periodic excitement of this nerve, or of some of its fibres, produced either directly, or in a reflex manner by irritation of various organs, is believed to be a common cause of asthma. According to some authors direct irritation of the vagus, or some of its branches, may sometimes be occasioned by swollen bronchial or tracheo-bronchial glands, which by occasional increased tumefaction produce paroxysms of asthma. This is thought to be the explanation of the etiology of the disease when it occurs in children after measles and whooping-cough.

Bronchial asthma occurs much more frequently through excito-motory or reflex action. Thus, irritation of the bronchial branches of the vagus nerve, giving rise to asthma, may be produced by the action of an irritant on the Schneiderian membrane, the skin, the circulatory and abdominal organs. Of such reflex nature is the asthma which is produced by the inhalation of ipecacuanha powder, the odor of dried hay, fodder, rye, pollen, and the like. So also cold water suddenly applied to the feet has been known to excite the bronchial spasm. Indeed, one of the peculiarities of asthma is that the paroxysms may be induced through the action of an irritant on remote parts. Salter speaks of a case "in which the patient could regulate his asthma entirely by the condition of his bowels. They were, as a rule, relieved every evening. If the customary relief took place, and he retired to bed with an empty rectum, he awoke the next morning well; but if he neglected to relieve his bowels, or his efforts to do so were abortive, he was quite sure to be awoke toward morning by his asthma." Copland also, has observed that the paroxysms are often preceded by constipation. The cases of hysterical asthma are of an analogous nature, the paroxysms being often preceded by well-marked symptoms of uterine displacement or irritation.

A more common illustration of the reflex nature of asthma may be found in the fact that errors of diet are often provocative of the attack, particularly in persons who are at all predisposed to the disease. Salter says: "Cases of peptic asthma, in which the attacks are caused by pneumogastric irritation, are so common that I think few cases could be found of true spasmodic asthma in which the disease is uninfluenced by the state of the digestive organs, while in a very large number it is entirely under their control. This fact is so patent and so generally recognized, that it has by many writers been made the basis of their classification of asthma: thus Dr. Bree and Dr. Young erect into a distinct species those cases that are dependent on gastric irritation. Therapeutically, the full appreciation of this fact is most important; more is to be done for our patients on the side of the stomach than in any other direction. An observant and thoughtful physician once said to me that he considered dietetic treatment the only treatment of asthma."

According to the theory of Bree, all the spasmodic muscular contractions in asthma are but efforts to get rid of irritating material present in the bronchi this irritating material being mucus, which is finally expelled, and then the paroxysms subside. But the presence of mncus must, I think, be regarded as having a *post* rather than a *propter* relation to the disease. The first appearance of moist râles and loose cough is looked upon as the harbinger of relief, and it must be remembered that the bronchial spasm subsides coincidently with the first appearance of expectoration, instead of continuing until all the mucus has been expelled.

As to the origin of the sputum, which is often expectorated in very large quantity, I have to say that not only does clinical experience lead to the assumption that a severe congestion of the mucous membrane of the bronchi takes place during the paroxysm, but that Stork has even demonstrated the correctness of this view by tracheoscopic examination, by which he found the mucous membrane of the trachea and larger bronchi intensely congested during the attack. If this is true of the larger, it is reasonable to infer that this hyperæmia exists even to a greater degree in the smaller bronchi. This condition would evidently give rise to the catarrhal symptoms; and it cannot be wondered at that long continued and frequently recurring attacks of asthma should lead to chronic bronchial catarrh, a condition so often observed in confirmed asthmatics.

Concerning the character of the sputum, it is of a grayish-white color, generally frothy and viscid,

and contains a mixture of granular and ordinary, mucous cells, cylindrical and ciliary epithelium and sometimes pus cells and particles of blood, all united together in dense and elaitic clumps. Leyden, in 1871, discovered in the sputum more or less abundant layers of fine pointed octahedra crystals, the nature of which he was not able to determine, but thought it probable that they were composed of a crystallized substance analogous to mucine. As to the relation of this symptom to asthma, Leyden has advanced the theory that these fine pointed crystals irritate the peripheral terminations of the vagus nerve, and thus through reflex action occasion bronchial spasm. But Leyden's attempts to prove this theory experimentally have not as yet succeeded. As previously stated, the essential condition in asthma is believed to be spastic contraction of the muscles of the smaller bronchial tubes. This proposition is now so generally accepted that it is, perhaps, unnecessary to set about proving it. I will, however, so far trespass upon the time of the reader as to refer to two or three clinical observations in the disease which seem to me quite sufficient to establish the theory beyond all question. First we have dyspnœa of an intense and agonizing character suddenly appearing in a person while in a state of apparently perfect health, and in a short time disappearing equally sudden, without leaving behind any marks of disease. Evidently dyspnœa of this nature points to temporary stricture somewhere in the respiratory organs; and what would more probably explain the nature of this stricture than muscular spasm?

Then, again we have, besides dyspnœa, well-marked, even shrill sibilant râles, and prolonged expiration, both of which are very prominent symptoms in asthma. Now, we know that when air is forced through hollow tubes of even calibre, no musical sound is produced, but if they are narrowed at certain points, the air in them is thrown into vibration and they become musical instruments. Likewise, the musical sounds observed in the chest in asthma are doubtless the result of narrowing of the bronchial tubes at certain points. And if these sounds appear and disappear with the paroxysm, what would better explain this circumstance than muscular contraction and relaxation of certain portions of these tubes?

Prolonged and forced expiration has been referred to as a prominent symptom in asthma; this symptom also indicates constriction of the medium sized and smaller bronchi. Acording to Biemer, the inspiratory force acts antagonistically to the constricted bronchial muscles, and forces the air through them in the alveoli; but despite the efforts of all the expiratory forces, the air escapes but slowly and incompletely; hence follows insufficient change of air in the lungs, and distension, which, secondarily,give rise to a sensation of want of air, and to reflex straining of the expiratory forces.

While these and other clinical facts evidently justify the belief that the phenomena of asthma are dependent upon bronchial spasm, yet the question arises: What is the cause of the bronchial spasm? We may say truly that it is often the result of some stimulus applied to the mucous membrane of the bronchial tubes, or to some remote part operating on the bronchial muscles through the intervention of the excito-motory system, but the same stimulus applied in the same way will not produce asthma were the tendency to the disease does not exist. Agents which act in this way can only be regarded as co-operative factors in the production of the paroxysm; before they can excite asthma there must be present a certain predisposition to the disease, a certain unknown something. We are therefore obliged to confess that the ultimate cause of asthma is as yet unknown. All that we can safely affirm is that the proximate condition is muscular contraction, and that the primary disease consists in some peculiar unknown neuroses. With these remarks we pass to a brief consideration of the second part of our subject.

Treatment.—The treatment of asthma, like that of all other paroxysmal diseases, must be divided into the treatment of the paroxysm, and that in the interval. The paroxysm, however, constitutes the principal feature of asthma, and it is for the amelioration of this condition that the treatment is chiefly directed.

The relief afforded to the paroxysm by the use of certain drugs, whose action is well known, furnishes, I think, convincing proof of the correctness of the spasm theory. I refer to that class of drugs known as nauseants or depressants. As soon as their peculiar effect is produced, the spasm relaxes, and the dyspnœa ceases. They act in asthma just as they do in strangulated herina, viz., by causing muscular relaxation. The drugs of this class which have been used are tobacco, tartar emetic, and ipecacuanha. The two first of these are more speedy and positive in their action, but, on account of the extreme collapse which sometimes follows their use they have, I think, not met with general favor. Ipecacuanhia, however, is very manageable, and its after-effects are quite innocent. In order to be of most service it should be given in a positive dose—say twenty grains of a powder—at the very approach of the paroxysm. Salter speaks favorably of this drug, and relates a case illustrating its happy action, as follows: A youth, who had asthma from his infancy, was attacked quite regularly, once a week, being awoke with the paroxysm about four or five o'clock in the morning, and it would continue for several hours before he was able to dress himself. About the middle of the forenoon the paroxysm would abate a little, but would deepen in the afternoon, and toward bedtime become so distressing that he was unable to sleep. Twenty grains of ipecacuanha powder was always sure to relieve the paroxysm within half a hour after taking it, and give him perfect freedom from the disease for one week. Salter says "it was clearly

not as an emetic that it (ipecacuanha) acted but as a depressant for the relief took place before the vomiting."

Certain other drugs known to produce muscular relaxation have been found servicable. Opium has its advocates, though I must say I have not seen any benefit follow its use. On the contrary, I think I have seen it do harm, by aggravating the very condition it was intended to relieve. We know that asthma is more prone to occur at night, during the insensibility of sleep, than during the waking hours. Salter explains this fact by supposing that sleep exalts reflex nervous action, through which circuit he thinks the phenomena of asthma are in almost every case excited. Opium he condemns, because it tends to produce lethargy and sleep, and, in this way, increases excito-motory susceptibility.

But I have found chloral hydrate, although a hypnotic, to act very favorably. It will almost always considerably diminish the severity of the paroxysm, and sometimes will cause it to disappear within a few minutes after the dose has been administered. The dose should be large, from twenty to forty grains. Biermer, Liebreich, Lebert, and some other observers, have seen very satisfactory results follow the use of this drug in asthma.

Chloroform and ether, by inhalation, have been recommended on high authority to allay the bronchial spasm. I do not see why they should not very effectually do so, yet I confess that I have never had the courage to try them. Salter says: "One of the most powerful and speediest remedies which we possess for asthma, to which I should, perhaps, give the first place of all, is chloroform." Walshe says he has seen it used in three cases, and with this result: "Total relaxation of the spasm during the continuance of insensibility, with the immediate return of dyspnœa on the restoration of consciousness," etc. The imperfect change of air in the lungs during the paroxysm, as indicated by the blueness of the surface, would certainly contra-indicate the use of chloroform, and I should therefore regard it as an unsafe remedy. The same objection would hold good against ether, though it doubtless would be much less dangerous.

Nitrite of amyl, by inhalation, is a remedy newly introduced into practice, and very favorable results have been reported from its use in the paroxysm by several observers. So far as my personal experience goes, I have tried it in only one case, and in that instance it undoubtedly aggravated the dyspnœa.

The inhalation of fumes emitted by burning saltpetre or stramonium, or by smoking the latter, has long been recognized as possessing a controlling influence over the asthmatic paroxysm. When stramonium is employed, the dried leaves are either smoked in a pipe or in the form of cigarettes. All of the so-called "asthmatic cigarettes" sold in shops doubtless owe whatever efficacy they may possess to datura. When saltpetre is used it is almost always in the form of nitre-paper, which is prepared, as is well known, by dipping bibulous paper into a saturated solution of nitrate of potassa. This, when dried, is burned in the apartment of the patient.

Being familiar with the remedial value of stramonium and nitre when thus used separately, it occurred to me that their efficacy might be increased by combining them. During the past few years I have been in the habit of using such a combination, with results so very satisfactory, that I feel justified in recommending the following formula as a convenient and efficient remedy for the relief of the paroxysms of uncomplicated asthma:

℞ Stramonii foliarum, ʒ x.
Potassæ nitratis, ʒ v.
Sem. fœniculi, ʒ ss.
Sacchari, ʒ ij. M.

The stramonium leaves and the fennel seeds should be ground to a powder, not very fine, and passed through a sieve, so as to get rid of the stems or coarser fragments. All the ingredients should then be rubbed together in a mortar, without producing a very fine powder. The mode of using the material is to place a small portion of the powder on a dish and ignite it with a match. It should burn slowly and somewhat irregularly, emitting fumes as it burns, which, of course, are to be inhaled. The fumes may be conducted to the mouth of the patient by means of a paper hood placed over his head.

This remedy, if not more efficacious, is certainly more agreeable to the patient and more convenient then the inhalation of the fumes of rubning nitre-paper or the smoking of stramonium. The combustion of paper is always attended by a disagreeable odor, and the fumes, particularly if the paper is not very carefully selected, are apt to be too carbonaceous for inhalation. During an asthmatic paroxysm, when the patient is suffering from a severe dyspnœa, smoking is found to be very difficult: hence stramonium cigarettes cannot be very conveniently used. Therefore, the advantages of this remedy are, (1) that it possesses the combined value of nitre and srtamonium; (2) That it is free from the disagreeable odor and irritating smoke of burning paper; and (3) Tha it can be used without any effort on the part oft the patient.

There is no medicinal remedy known that can be depended upon to prevent the recurrence of the paroxysms. As asthmatics are generally dyspeptics, and as the paroxysms are frequently provoked by indigestion, there is perhaps no better prophylactic treatment, with the exception of change of residence, than that which is regimenal. The excito-motory action being exalted by sleep, it is important to an asthmatic person that digestion should be over and the stomach empty before going to bed. With many persons, care-

lessness in this particular is sure to be followed by a nocturnal paroxysm. As the day advances, digestion becomes slower and less energetic; breakfast is therefore the meal at which the asthmatic may with safety eat most heartily, and he should take the opportunity at this meal, if at all, to gratify his palate. As a rule, however, the diet should be of the simplest and plainest kind, yet nutritious. Of course, the strictest abstention from any article of diet that is known to produce asthma should be exercised.

There is nothing that promises so much for the relief and cure of asthma as change of residence to a suitable locality. Salter says "that possibly there is no case of asthma that might not be cured if the right air could only be found." The caprice of asthma is something wonderful. A condition of atmosphere which is well adapted to one case will not always suit another. For many cases, therefore, experience alone will determine the suitable locality. There are, however, certain localities or conditions of atmosphere which seem well adapted to a very large number of cases. According to Salter, the atmosphere of London, contrary to what one would suppose, is very favorable to asthmatics. He says "that those parts of London, and other cities, that have the city character most strongly marked on them, are those that are most beneficial to asthma, that it is in the central, densest, smokiest parts, that the most striking results are seen." He cites a large number of cases showing perfect exemption from the disease by such a residence.

Sea-side air will often exercise a curative influence on asthma. It has been noticed by asthmatics who have sought a sea-side residence for relief from suffering, that a change in the direction of the wind, from a sea breeze to a land breeze, will often cause a recurrence of the paroxysm. It seems evident, therefore, that a narrow strip of land, very nearly surrounded by sea, would be well adapted as a place of resort for asthmatic sufferers. Newport is thus located, and very favorable accounts are given of the beneficial influence of the atmosphere there on asthma. Dr. Samuel Ashhurst speaks very positively of the relief he has personally experienced from autumnal catarrh, accompanied by intense asthmatic symptoms, by a temporary residence at Bench Haven, New Jersey. So decided and invariable has been the relief that he has continued to resort to that place annually for more than twenty years.

Just the opposite condition of atmosphere, *i. e.*, an atmosphere greatly rarefied, such as is found in high elevations, is known to exert a most wonderful influence over asthma. Dr. Denison, who has studied very carefully the relation of the climate of Colorado to pulmonary diseases, says that in the treatment of this troublesome malady he knows of no remedy that can compare with the light air of this inland region. So fully convinced is Dr. Denison of the beneficial influence of this atmosphere that he adds, "almost without exception, uncomplicated cases of asthma may gain decided relief or a permanent cure in Colorado." He further remarks: "Generally speaking, the relief is marked as the base of the mountains is reached, and often after crossing the Missouri River. If all the results were written, hundreds of the present residents of Colorado could be cited who had asthma months or years before coming here, who had exhausted all the other known means of relief in vain, but who have now been nearly or quite free from asthmatic symptoms since becoming residents of Colorado." By way of illustration, Dr. Denison mentions two or three very striking instances, an account of which may be found in the Transactions of the American Medical Association of 1876.—W. M. Welch, M.D., in *The Medical Bulletin.*

TREATMENT OF EPILEPSY.

By Robert Saundby, M.D., Edin.

Success in the treatment of epilepsy depends, first of all, on accuracy in diagnosis. The maladies likely to be confounded with true epilepsy are: 1. *In young children.* Convulsions from digestive disturbance, teething (?), worms, the exanthemata, tubercular meningitis, &c. 2. *In boys and girls and young adults of both sexes.* Hysteria. 3. *In adult women.* Hysteria. 4. *In adults of both sexes, but more usually in males.* Uræmia and convulsions from alcoholic or lead poisoning. 5. *At any period of life.* Convulsions may occur as the result of morbid growths in the brain, and where these do not reveal themselves by the ordinary signs of cerebral tumor (headache, vomiting, double optic neuritis) a correct diagnosis may be impossible.

In very young children I think we should be cautious in diagnosing true epilepsy, but I am deeply impressed with the importance of the view expressed by Sir William Jenner, that convulsions in young children are frequently a cause of chronic epilepsy, by setting up an epileptic habit in the nervous system. Hysteria is a very frequent source of difficulty in diagnosis, especially when we have no opportunity of observing the fits. We may be aided by the absence of tongue-biting or injury from falling, and by the presence in the patient of hemianalgesia and amblyopia. In the hysterical fit, opisthotonos is, according to Charcot, always very marked and characteristic. Such fits are also usually of longer duration, and followed by outbursts of laughing or crying. It is, too, in hysterical fits that the patient struggles violently with those who endeavor to hold her, using often her teeth and nails. Uræmic fits can only be accurately diagnosed by discovering the presence of chronic Bright's disease (albumen and casts in the urine, high-tension pulse, cardiac hypertrophy, retinal hæmorrhages, &c.). Albuminuria is not uncommon in true epilepsy, probably from the anæmic and

dyspeptic condition of these patients. Generally speaking, it is necessary to exclude uræmia in all cases of epilepsy showing itself for the first time in an adult. Alcohol and lead and, in France, absinthe, sometimes give rise to epileptiform attacks, but a knowledge of these facts is sufficient to enable us to exclude this source of error.

Treatment : The bromide salts are by far the most powerful and efficient means we possess of arresting the convulsions of epilepsy.

Dr. A. Hughes Bennett gives [*Med. Abs.*, pp. 68, 119, 1881] as the result of his statistical inquiries, that the bromides checked the fits in 12·1 per cent., diminished them in 83·3 per cent., while in 2·3 the treatment had no apparent effect, and in 2·3 the number of attacks was augmented during treatment. That is, in 95 per cent. of the cases these drugs proved themselves of value.

Pharmacologists teach that the bromides diminish reflex action and stimulate the vasomotor nerves, but in our ignorance of the pathology of epilepsy it is useless to speculate on the mode in which they arrest the fits. The salts in common use are the bromides potassium, sodium, and ammonium. Bromide camphor is very insoluble, and therefore difficult to administer. I have thought it useful in hysteria. Bromide lithium is recommended by Dr. Weir Mitchell, but it is expensive. Bromide of potassium is the most popular in this country. In America the sodium salt is said to be preferred. Brown-Séquard recommends the administration of all three in combination.

The drug may be administered either in one large dose at bed-time, with a tonic during the day, or the dose may be taken in divided portions, two or three times in the day. I prefer the latter plan for the following reasons : 1. The same quantity of a drug generally acts more powerfully when given in divided portions than all at once. 2. The influence of the drug is kept up throughout the day. 3. Large single doses are more likely to cause depression and bromism.

As our object should be to control the fits with a minimum dose, I am in the habit of beginning with ten grains of brom. pot. three times a day. In many cases this is sufficient. I invariably add to it ten minims tincture digitalis to counteract any depressing tendency. At the same time I order some laxative to be used occasionally, and enjoin attention to the state of the bowels, as constipation acts frequently as a predisposing cause of epileptic attacks, even when the patient is under the influence of the bromide. In general, I recommend abstinence from alcohol, and, so long as the patient's appetite is good and the general state of nutrition is fair, alcohol is more likely to do harm than good. The diet should be rather meagre than liberal, especially in animal food ; and the tendency to over-eat themselves, often displayed by epileptics, should be carefully checked. If the fits do not cease under this treatment, I raise the dose of bromide, first by another ten grains of bromide of potassium, then by ten of sodium, and, finally, by ten of ammonium. The most useful adjunct to the bromides is oxide zinc. A pill containing three to five grains of this, combined with one-sixth of a grain extract of Indian hemp, should be tried with each dose of the mixture when the bromides seem to be failing.

I have sometimes substituted tincture belladonna for digitalis in obstinate cases, with, as I have thought, benefit. As a rule, with only a small number of exceptions, this treatment is satisfactory ; for, even where it does not do all we wish, the patient is worse when he leaves it off.

In those unforunate cases in which the bromides, seem powerless, Dr. Gowers recommends borax in scruple doses, combined with one or two minims of liquor arsenicalis. Dr. Stewart Lockie has reported a case treated successfully with this remedy after bromides had failed. Dr. Law [*Med. Abs.*, p. 265, 82] has recommended sodium nitrite, and Dr. Ralfe has reported in favor of this drug ; five cases which had not benefited from the bromides having improved under its use. In the following cases, all of them rebellious to ordinary treatment, I give the results of my use of these remedies.

Case 1. D. F., æt 27, had been taking bromides under my care for three years ; at one time he went for five months without a fit ; latterly the fits have returned in spite of the medicine, and during the last week he has had three. Sept. 27, 1881, ordered : ℞. Sodæ bibor. gr. xv. Aquæ, ℥ j. t. d. s. In the following fortnight had three fits, and dose was increased to a scruple. In the next eleven weeks had nine fits. Was then ordered a pill containing five grains oxide zinc with each dose of the medicine. In the following four weeks had five fits, when cannabis indica, one-sixth of a grain, was substituted for the zinc, and afterwards increased to one fourth grain. Took these medicines for nine weeks, during which time he had 13 fits. Then ordered a scruple bromide potassium, and ten minims tinct. digitalis, which he has continued to take, having occasional fits, and every now and then a bad outburst, but, on the whole, his condition has lately been favorable as to fits.

Case 2. R. G., æt. 21, been under care for 18 months, taking bromides with little benefit ; has never been long without a fit, and has lately had several every week. Oct. 4, 1881. Had had five fits in the last fortnight. Ordered : ℞. sodæ bibor. gr. xv. Liq. arsenicalis, Mii. Aquæ, ℥ j. t. d. s. In the following week he had seven fits, and borax was increased to a scruple. Next week had four fits, and after that one about every day for a week, when was ordered : ℞. Sodæ bromidi, ℈ j. Tr. digitalis, Mx. Aquam ad ℥ j. t. d. s. Took this six weeks, having 12 fits in that time. Bromide then increased ten grains, and in the following week had two fits. Ordered a five-grain zinc pill in addition. Had two fits the next fortnight, but the zinc made him vomit, so had to be reduced to two grains, and he got 25 grains brom. pot. instead of

the half-drachm brom. sod. In the following fortnight had 13 fits; cannabis indicæ gr. 1-6 was added to the pills. In the next fortnight had six fits; zinc was raised again to five grains, and he went for a fortnight without a fit. Towards the end of the following fortnight he had seven or eight fits in a few days, then he went a month with only two fits in one day. Went on pretty well from April, 1882, to Oct., when he had 15 fits in three weeks. Ordered: ℞. Sodii nitritis, ʒj. Aquæ, ℥ j. t. d. s. In the following week had nine fits; and dose was raised to half a drachm. That week had three or four fits,so the medicine was continued, but the next time he came he said he had had 15 fits in the week, and felt sick and giddy after each dose of the medicine. Was therefore ordered: ℞. Pot. brom. gr. xxv. Tr. digitalis. Mx. Aquam ad ℥ j. t. d. s.; ℞. Zinci oxidi, gr. iii. Extr. cann. ind. gr. 1-6. Ft. pil. t. d. s.; and in the following month no fits occurred.

Case 3. A. K., æt. 32, took the bromides and zinc without benefit for two months: had three or four fits daily. Ordered: ℞. Sodæ bibor. ʒj. Liq. arsen. Mii. Aq. ad ℥ j. t. d. s. Had eight fits in the next four weeks, and then went three weeks without a fit. A large carbuncle formed on his buttock, and he had nine fits in a fortnight. The carbuncle healed well under Mr. Furneaux Jordan's iodine treatment, and in the next month he had eight fits. An ill-marked psoriasis broke out on his legs, presumably due to the borax; borax was stopped, and bromides substituted. The rash got well, but the fits became worse, and the borax was resumed without good result: had ten fits the first fortnight, six the second, two the third, and six the fourth. Was then ordered scruple doses sodium nitrite, and in the following week had four slight fits, but had been taking half-doses of his medicine by mistake; in the next week had three bad fits and resumed the bromides. In the following week had seven fits, and was ordered to have a seton put in the back of his neck. In the next week he had five slight fits.

Case 4. M. R., female, æt. 24, had been taking bromides with zinc and cannabis indica pills for nine months, without cessation of fits, about one a fortnight. Ordered: ℞. Sodæ bibor. gr. xv. Liq. arsen. Miii. Aquam ad. ℥ j. t. d. s. After this she was free from fits for four weeks, when she had three in one day. The dose was increased to a scruple, and she has gone eight weeks without a fit.

Case 5. A. J. S., æt. 16, was under treatment by bromides for six months,having about a fit a week, but in the last week has had 12 fits. Ordered: ℞. Sodæ bibor. ʒj. Liq. arsen. Mii. Aq. ad. ℥ j t. d. s. Went after this for nine weeks without a fit, when he had one in bed. Then relapsed, but was ordered his medicine every four hours, when the fits stopped entirely. The ends of his fingers desquamated while taking the medicine.

Case 6. G. C., æt. 16, had been taking bromides for ten months with no benefit. Was ordered scruple doses of borax three times a day. He had been having about one fit a fortnight. In the following fortnight he was not so well, having two bad fits, and in the next fortnight he had several fits, and was so ill that he had to go to bed. Ordered: ℞. Sodii brom. ʒj. Tr. belladonnæ, Mx. Aquam ad ℥ j. t. d. s. In the next fortnight he had two fits; a five-grain oxide zinc pill was added. In the next fortnight had no fits, and in the next only one: brom pot. was substituted for the sodium salt, and he had no fits in the next fortnight. After this he had bad attacks now and then, but sometimes went for a fortnight without fits. His prescription was, a drachm bromide sodium at bed-time, and half an once inf. cinchonæ three times a day. For a little time seemed better, but the fits returned as badly as ever. Ordered: ℞. Sodii nitrit. Pot. bromidi *aa* ʒj. Tr. digitalis, Mx. Aquam ad ℥ j. t. d. s. Since taking this has gone eight weeks with only nine fits, and thinks himself better.

Case 7. H. B., female, æt. 21, has been attending as an out-patient for years, taking bromines without benefit, having fits every day or two. ℞. Sodæ biboratis, ʒj. Aquam ad ℥ j. t. d. s. Was better on this treatment for about five weeks, when fits returned, and she was ordered her medici e every four hours. I have no further notes of this case, and presume she ceased attending. I think there is evidence of decided benefit from the use of borax in Cases 4, 5, 7. Sodium nitrite has done good definitely in no case; doubtfully in Case 6.

Dr. Gowers speaks in favor of iron, together with specific remedies. Hughlings-Jackson and Brown-Séquard oppose this practice. I am certain that I have seen cases made worse by iron, and I think its routine administration very undesirable. Although there can be no doubt of the power possessed by the bromides to control the fits, they appear to be quite useless to stop the minor attacks of epileptic vertigo, which are often by their frequency more distressing to the patient than the graver but rarer convulsions.

I have found that caffeine and theine, which I had previously discovered to possess the power of relieving the vertigo of Bright's disease, are very useful remedies in this condition. I have also found benefit from nitro-glycerine. The following cases are illustrations:

Case 8. John D., æt. 27, had been epileptic for seven years before coming under observation, Aug., 1881. Fits were readily stopped by ten-grain doses brom. pot. combined with digitalis, but he suffered much from vertigo. Was given theine, and dose was gradually raised to three grains three times daily, with great benefit,the vertigo ceasing entirely. In course of treatment the theine was twice discontinued, but its use had to be renewed on account of the recurrence of the old symptom. Case 9. John S., æt. 20, never had fits, but was subject to attacks of vertigo, in which he often fell down and lost consciousness for a moment. Attacks had occurred about every week for last two years.

After taking bromide and digitalis without any benefit, was ordered one grain of theine three times a day, and the attacks of vertigo ceased entirely. Case 10. A. C., male, æt. 19. got rid of his fits under the use of bromides, but remained very subject to vertigo : on adding two grains of theine to his medicine the attacks of giddiness ceased. Case 11. Lizzie T., æt. 21, obtained cessation of fits by 15 grains brom. pot. combined with two minims tincture digitalis taken three times a day, but was much troubled with frequent vertigo, which was not benefited by dieting and attention to the bowels, or by rhubarb and soda or caffeine in doses of two grains three times a day. On putting her on minim doses of nitro-glycerine three times a day, she was at once relieved. Case 12. M. S., female, æt. 19, has had fits for five years every month. Under bromides the fits were effectually controlled, but she complained much of frequent attacks of giddiness, which were not at all relieved by two-grain doses of theine. I substituted minim doses nitro-glycerine (1 o/o solut.) which were raised afterwards to two minims, and on this treatment she remained quite free from giddiness.

The principal points to which I desire to draw attention are : 1. The value of combining bromide salts with each other and with digitalis. 2. The value of zinc and canabis indica as adjuvants to the bromide. 3. The use of borax in some cases which resist the bromides. 4. The employment of caffeine or theine and nitro-glycerine in the treatment of epileptic vertigo.—*Practitioner.*

CONVALLARIA MAJALIS IN HEART DISEASE.

Recently efforts have been made to give this remedy the place of digitalis as a diuretic and remedy for certain forms of heart disease.

It is an old remedy. Culpepper regarded it as a valuable remedy for weak memory, lost speech and apoplexy. Gerarde recommended it for gout. For long years the peasants of eastern Europe have valued it in cases of dropsy. In 1880 Drs. Troitsky and Bogojavlensky, two Russian physicians, on investigating its action, said that it was valuable in certain forms of heart disease. Prof. Botkin, of St. Petersburg, confirmed most of these results. In July, 1882, Professor Germain Sée published the results of his experiments. (Bull. Gen. Ther., *Brit. Med. Jour.*)

In 1858 Walz isolated two glucoside, which he named "convallarin" and "convallamarin." The investigation of their chemical and physiological properties by Tanret and Marme soon followed. It was found that convallarin possesses purgative properties only, while convallamarin is a heart poison, allied to digitalis, helleborin, etc. The preparations usually employed are the aqueous extract of the leaves, an aqueous extract of the flowers, and the extract of the entire plant. The last is the best for the obtaining of the full therapeutic effect.

A drop of the extract of the flowers injected under the skin of a frog arrests its heart in systole very much as digitalis and some other remedies do. Four drops of this injected into the vein of a dog caused death in ten minutes. The heart appears to be first slowed, and the respirations are quickened. Then the heart's action becomes irregular and the pulsations weak and very rapid. The blood pressure first raises and then falls. The respirations gradually diminish. The heart stops first, then the pressure falls to zero, and the respiratory movements stop. The excitablity of the pneumogastric is weakened, although not abolished.

Prof. Sée reports five cases of mitral insufficiency characterized by want of rhythm, œdema of the lower extremities, dyspnœa, etc. The doses of the extract given were from seven to fifteen grains daily. In each case there was marked improvement; the heart's action becoming stronger, the breathing better, and an increase in the amount of urine passed.

A case with mitral stenosis was also benefited ; so, also, several cases of aortic insufficiency.

Thus it appears that the favorable effects of this drug upon the heart and blood vessels are constant and reliable.

Favorable reports have been made as to its practical value, in cases of palpitation from exhaustion of the pneumogastrics, in simple cardiac erythema with or without hypertrophy and with or without valvular lesions, in dilatation of the heart, etc.

Some observers have failed to get any appreciable effect from this drug. But it would seem from the mass of favorable evidence adduced that they must have either had a poor article, or failed to use it in appropriate doses.—*Detroit Lancet.*

ON PERSONAL PRECAUTIONS THAT MAY BE ADOPTED BY MEDICAL MEN WHILST ATTENDING CASES OF INFECTIOUS DISEASE.

Dr. Charles Green makes these suggestions in the *Lancet :*

1. Always have the window opened before entering the patient's room or ward.
2. Never stand between the patient and the fire, but always between him and the open window.
3. If possible, change your coat before entering the room.
4. Do not go in for unnecessary auscultation or other physical examination.
5. Stay as short a time as possible in the room.
6. Never, while in the room, swallow any saliva.
7. After leaving the sick room, wash the hands with water containing an antiseptic.
8. Rinse out the mouth with diluted "toilet Sanitas" or Condy's fluid, also gargle the throat with it, and bathe the eyes, mouth and nostrils.

9. Expectorate and blow the nose immediately on leaving the sick-room.

10. Keep up the general health by good food, exercise, and temperance.

11. In addition to the above recommendations, which are all pretty generally known, I would suggest another, which is, in my opinion, the most important of all. This is to filter all the air you breathe while in the sick-room or ward through an antiseptic medium. My method is to use a McKenzie's inhaler over the nose and mouth. I carefully soak the sponge in a strong solution of carbolic acid before entering the sick-room. It is so made that all the air breathed must necessarily come through this sponge, and the expired air is emitted by a valve action at another place. I have worn this not only in the Fever Hospital wards, but in many of the typhus dens in this borough. It is to this method that I attribute the fact that although I have attended between 200 and 300 cases of typhus during the last twelve months, and seen many more, I have hitherto escaped infection myself. The only objection (which is not of much importance in a hospital) is the unsightly appearance one has with the inhaler *in situ*. This objection, is, however, a very slight one when weighed against the greatly increased safety one not only feels, but I believe actually possesses. I am not aware of this method having been mentioned previously; and this fact, and my desire to prevent a repetition of the late disastrous fatalities, must be my apology for bringing it before the profession.—*Med. and Surg. Report.*

HOW TO HOLD THE LARYNGOSCOPIC MIRROR.

Don't hold your mirror as you would a cart whip, hold it as you would a pen, and pass it over the extended tongue without hitting that sensitive organ. If you scrape the tongue with the mirror, ten to one the patient will gag. When you get it beyond the tongue, lift the uvula gently on the back of the mirror, and you will be almost sure to see the reflection of the epiglottis and more or less of the larynx. A gentle motion of the mirror toward one side or the other or forward or backward, will enlarge the field of vision correspondingly.—*The Polyclinic.*

BATHING INFANTS IN THE SEA.

At the present season a mistaken and mischievous practice is much in vogue. Daily torture is inflicted on thousands of tender and helpless infants by forcibly plunging their bodies, in spite of shrieks and struggles, into the open sea. This cruel and time-honored process may now be seen in full operation at any seaside resort. Affectionate mothers hand over their infants to stalwart and impassive bathing-women, to be plunged head foremost into the sea, under the absurd notion that the procedure vastly benefits the little ones. Day after day, with relentless regularity, very young children and babies are borne out amid the waves and subjected to their dreaded ducking, in the firm belief that their trembling bodies, often writhing to the verge of convulsions, are thus made healthy and hardy. All experience on the subject, and the teachings of all medical authorities on sea bathing, agree in support of the two following rules—namely, that a child under two years of age ought never, under any circumstances, to be bathed in the open sea, and that no one, child or adult, can enter the sea without danger while under the influence of emotional excitement.—Under two years of age, a child's body is too weak to gain any benefit from the shock of immersion in the open sea. Its nervous and circulating forces are too feeble for the development of that vigorous reaction without which sea-bathing is either useless or hurtful. In the absence of strength for such reaction, a sea-bath tends to chill an infant's body, and predisposes to internal congestions. At any age, the shock of immersion in the sea brings risk of danger, and even of death, when the emotions are powerfully excited, and especially when the mind and body are dominated by that most depressing of human emotions—fear. Infants are not always bathed in the sea merely with the intention of making them strong. There is an old sea-side tradition that babies diligently bathed become fearless in the water when they grow up. This notion is also false. Than that infants gain courage by being plunged in the sea, it is more probable that many a nervous child has acquired a dread of bathing which no after experience could remove, because it was compelled in fear and trembling to plunge under water. If a child be sufficiently robust to develop a good reaction, if it be over two years of age, and, above all, if it be not afraid, it may be bathed in the sea with advantage. If any of these conditions be wanting, sea-bathing for children is likely to be positively injurious.—*British Medical Journal.*

ETIOLOGY OF URETHRITIS.

By J. Henry C. Simes, M.D.,

Professor of Genito-urinary and Venereal Diseases in the Philadelphia Polyclinic and College for Graduates in Medicine.

The line of demarkation which separates a urethritis caused by the contact of gonorrhœal pus, and an attack due to the effect of some other irritant introduced into the urethral canal or otherwise, is so obscure and undefined that in many cases it is very difficult, or even impossible, to decide the etiology of the affection. Many writers upon this subject are willing to base their diagnosis upon the differences in the symptoms as presented by this disease when having its origin in gonorrhœal contagion, or when from other causes. The former is said always to run a more

regular course, and is more intense in its phenomena, while the latter is more irregular, and milder in its symptoms. Yet they all admit that there are cases, and not of unfrequent occurrence, in which the cause is positively known, but still the symptoms are such as to deceive the most experienced observer. For example, a urethritis is contracted from a well-marked case of gonorrhœa; the resulting lesions may be so slight that it is not possible to differentiate the case from one due to other causes than gonorrhœal pus. It is also equally true that a urethritis having its origin from other causes than gonorrhœal contagion may occasion all the symptoms of a violent attack of gonorrhœa.

These differences in the nature and course of a urethritis are accounted for in one of several ways: either the person affected is peculiarly susceptible to the gonorrhœal contagion, or has a very sensitive mucous membrane lining the urethra; or that, for some unknown reason, he is not so susceptible, or his mucous membrane is not so sensitive; in other words, we have here, as in other diseases, an individual peculiarity, a so-called idiosyncrasy. The same reasoning, I also think, is applicable to cases of urethritis due to causes other than gonorrhœal contagion, the same irritant affecting individuals in varying degrees.

This, to many unsatisfactory, explanation of the variations in cases of urethritis, due to different causes, has led investigators to seek other etiological reasons for the affection, and has resulted in the formation of two schools, the one advocating the existence of a specific gonorrhœal virus, the other believing the disease an inflammatory process, varying in intensity, and not due to any special poison or virus, by which may originate from any irritant capable of causing inflammation.

In reading over the views of writers upon this subject, it will be found that there is much confusion and many unsettled opinions. Some are very positive as to the specific nature of the gonorrhœal contagion; others, while they acknowledge that there is great probability of gonorrhœa depending upon the action of a special contagious element, can see no clinical distinction between it and a urethritis produced by irritants of other kinds; and, finally, those who regard every urethritis, no matter how originating, as an inflammatory process, free from any specific element, and not depending upon any special cause.

Those of the first class, who believe in the existence of a special virus, which possesses the property of exciting a violent inflammation when brought in contact with certain mucous membranes, base their opinion upon certain peculiarities which characterize gonorrhœa, and which they assert cannot be accounted for upon any other ground. These peculiar properties are, according to these authors, not met with in ordinary urethritis. Thus the pus in a case of gonorrhœa is said to be much more irritating and virulent than that secreted in a case of ordinary urethritis, and a very minute quantity, when placed in contact with the perfectly healthy mucous membrane, always causes an attack of gonorrhœa. A distinct period of incubation is also claimed for gonorrhœal urethritis. The general character of the discharge in gonorrhœa is said to be unlike that observed in ordinary urethritis. The similarity of the symptoms in all who suffer from gonorrhæa is considered favorable to the existence of a specific virus. Finally, the existence of a special micrococcus in gonorrhœal pus is the most recent view in favor of the specific nature of this malady.

Those who do not regard gonorrhœa as an affection which is caused by a specific virus, but consider it an inflammatory process differing in no way from any other inflammation, either in cause or effect, base their claim upon the analogy of the symptoms in a case of gonorrhœal and ordinary urethritis—variations in intensity are met with in both cases—upon the pathological lesions, which are common to both, and upon the want of analogy to other undoubted specific diseases.

From my own studies upon the etiology of gonorrhœa I have been led to consider this disease as simply inflammatory in nature, and not possessing any such property as specificity. The symptomatology, pathology and therapeutics of this affection are all favorable to its non-specific and inflammatory nature.

That the pus secreted in a case of gonorrhœa is possessed of peculiar properties, giving it a more irritating and virulent character, is by no means limited to this disease, since any inflammatory secretion is liable to take on such properties when the inflammatory process is subjected to more than usual irritation. The experiments of Mr. Lane may be referred to as an instance bearing upon this question. He found that by irritating the indurated chancre the inflammatory process was increased, and the secretion became more profuse and irritating, so much so that it was possible to auto-inoculate in cases where, previous to the irritation of the sore, auto-inoculation did not take place with the secretion from the sore.

Is it true, as is asserted by the advocates of the specificity of gonorrhœal pus, that an attack of gonorrhœa invariably follows when such pus is brought in contact with a perfectly healthy mucous membrane? Clinical experience does not absolutely sustain this view, and more especially is this the case in regard to females. The following observation, by Dr. J. Wm. White,* very forcibly demonstrates this point. A man suffering with a purulent urethral discharge had connection with a woman; two hours later the same woman had connection with another man who was at this time in perfect health. Forty-eight hours after the connection there was developed in the previously healthy man an attack of acute urethritis, the woman remaining free from disease,

* Holmes' System of Surgery. Packard's edition, Vol. II.

as verified by careful examinations. According to the experience of Dr. White, such cases are not uncommon.

That there is a distinct period of incubation between the time of exposure and the outbreak of the disease in gonorrhœa, can scarcely be admitted as a peculiarity of this affection ; where the onset of symptoms characteristic of the lesion are so very variable in making their appearance—from a few hours to one or two weeks—the existence of a period of incubation becomes certainly very questionable. And it is further to be remembered, that this only refers to objective symptoms. It is very probable, indeed, quite possible, that there occurs from the moment of exposure a pathological change, which is not appreciated either by patient or physician. That such may be the case is in a measure shown by the occasional occurrence of cases which every now and then present themselves ; there are no objective symptoms of any kind which would lead to a diagnosis of gonorrhœa, yet from the time of exposure the patient is conscious of something out of the usual order ; he complains of nothing definite that may be connected with an affection of the genital organs, except that he is constantly reminded of the fact that he possesses a penis. After a variable time all the symptoms of gonorrhœa present themselves. Now, is this period between exposure and actual symptoms to be considered one of incubation? I am inclined to consider it a want of appreciation of pathological phenomena rather than an interval of non-activity of a virus. The length of the interval between exposure and evident symptoms may depend upon an idiosyncrasy of the patient, the susceptibility of the mucous membrane, or the nature of the irritant, rather than upon any specific element in the pus.

In regard to the character of the discharge in gonorrhœa differing from that occurring in a urethritis from any other cause, it may be said that this is feature depending solely upon the nature of the irritant. A urethritis, other than that due to gonorrhœal contagion, arising from the effect of any severe irritant, such as a strong solution of nitrate of silver, aqua ammonia, etc., may and does determine a secretion of pus, which possesses all the characters of the discharge during an attack of gonorrhœa.

That the similarity of symptoms in all cases of gonorrhœa favors the view of the existence of a specific virus in this disease, cannot be admitted as of any great importance, or of any value in respect to its etiology, since it is not at all uncommon to meet with cases of undoubted non-gonorrhœal urethritis in which the most experienced observer is unable to determine, from a study of their symptomatology, the nature of their etiology. Indeed, the difficulty of deciding the cause of any case of urethritis is so well recognized that all writers upon this subject, with scarcely an exception, are very careful to caution us in regard to this point, and think where there is the slightest doubt no etiological reason should be given, or if it is, it is well not to consider it as specific in nature, but rather the result of irritation from the secretions or otherwise.

In making a comparison of the pathological lesions met with in gonorrhœal urethritis, and those found in cases due to other causes, it will be seen that the histological changes are similar in both. They are the lesions of inflammation which are found in a mucous membrane when this process is in action, viz., hyperæmia, exudation of liquor sanguinis and white blood-corpuscles, and cell proliferation. These phenomena are made evident by the redness, swelling, and more or less abundant formation of pus.

Finally, I have to speak of the germ theory in connection with the etiology of urethritis. The presence of a micrococcus in the gonorrhœal discharge has of late been advanced, and upon it is said to depend the specific nature of the pus. That a micrococcus exists in the gonorrhœal discharge I have verified by personal observation ; but I am not willing to admit the specific nature of this organism, any more than I am inclined to consider the micrococcus found in pus other than gonorrhœal as possessing specific properties. The presence of a micrococcus in pus obtained from other sources than gonorrhœa I have also confirmed by investigation, and find it to have the same reaction with the staining fluid as that met with in gonorrhœal pus.

The specific nature of the micrococcus of gonorrhœa, I think has been refuted by the culture and inoculation experiments of Sternberg.* Among the several conclusions arrived at by this writer, he says, "Culture fluids containing these micrococci introduced into the healthy male urethra do not give rise to specific urethritis, or to any other noticeable result."

NOVEL TREATMENT OF ASTHMA.

Dr. R. B. Faulkner, of Alleghany, Pa. (*N.Y. Med. Record*) has had remarkable success in the treatment of spasmodic asthma, by applying tincture of iodine as a counter-irritant along the course of the pneumogastric nerves, from the upper part of the thyroid cartilage to near the upper border of the clavicles. The application is to be continued daily till the surface becomes irritated. Another part of his treatment is the forced inflation of the lungs by means of a Politzer bag filled with common air. At the time of a full inspiration, the nozzle connected with the bag is placed in the mouth, and the contents driven into the lungs so as to dilate the vesicles and put an end to the spasm which is the cause of the difficulty.

* *Medical News*, Jan. 20, 1883.

THE TREATMENT OF EPILEPSY.

The *Practitioner* for February, 1883, contains three articles upon the therapeutics of epilepsy that embody much that is valuable and suggestive. Dr. James Russell considers the remedies used in the treatment of this disease before the introduction of the bromides; but the results reported are far from satisfactory, — whether from iron, zinc, arsenic, strychnia, opium, cannabis Indica, belladonna, spinal ice-bag, blisters, seton, or static electricity, the verdict was almost the same, sometimes temporary improvement, usually ultimate failure.

Dr. Radcliffe continues his medical annotations concerning epilepsy, and discusses especially its treatment. Potassium bromide was introduced by Sir Charles Locock for cases of epilepsy in young women in which erotic excitability seemed to be the prominent element in the etiology. Dr. Radford subsequently extended the use of the remedy to all cases of epilepsy. Of the alkaline bromides, sodium, potassium, and ammonium, he most frequently gives the last named, as being less likely to cause eruptions upon the skin, or to stultify the patient. It also contains a larger proportion of bromine than the others. He usually gives from forty-five to sixty grains in the course of the day. His experience shows that the remedy may be continued in these doses for a long time without injuriously affecting the mind or bodily functions. With regard to large doses, he says that he has not found it necessary to go beyond one drachm a day; and with reference to the selection of appropriate cases, he remarks: What I have always found is, that the bromide dose not act kindly in cases where the memory is bad and the mental power generally enfeebled,— the mischief done, as a rule, showing itself chiefly in stultification and in disfigurement of the skin by rashes of various sorts, without any very certain change for the better on the attacks. I have indeed found that the attacks were less likely to be kept in check if the bromide was pushed to the extent of causing any stultification or much cutaneous disfigurement, and that it was never advisable to go so far as to produce 'bromidism,' which, to my mind, is an evil which is scarcely less ghastly than epilepsy itself. I am quite satisfied that harm rather than good is done by giving large doses of bromide of potassium or bromide of ammonium in ordinary cases of epilepsy where the memory is bad and the mental power generally enfeebled, and that forty-five grains in the course of the day is too large a dose; rather give too small a dose for an adult in such a case. In a word, the conclusion at which I have arrived is, that in any case the bromide has been pushed too far if it gives rise to any marked symptoms of 'bromidism,' that in cases of *le haut mal* with much mental enfeeblement this medicine is very likely to be hurtful even when only given in moderate doses, and that in the majority of cases of *le petit mal* the good to be done by it is barely appreciable."

He found great advantage in combining with the bromine salt iodide of potassium, bicarbonate of potassium, and especially chloride of ammonium. Iron is pronounced to be absolutely injurious to epileptics: arsenic, however, is often serviceable. Hypophosphite of sodium he praises particularly for its influence upon nerve-structures, and states that he does "not hesitate to say that the bromide often seems to be almost doubled in remedial value when it is given along with the hypophosphite, or or that thirty grains of the bromide, along with thirty grains of the hypophosphite, given in one or two doses in the course of the twenty-four hours, will go as far in controlling the attacks as forty-five grains of the bromide given by itself. And this is no small gain, for, by diminishing the dose of the bromide the risk of stultifying and disfiguring the patient is to that degree diminished." He considers it a mistake to be too ready to associate tonics and restoratives with the bromides in the treatment of epilepsy. The restorative he prefers is a dessertspoonful of brandy, rum or whiskey given in the dose of medicine, or else a capsule containing a drop of œnanthic ether after it.

Dr. Radcliffe further insists upon the necessity of proper hygienic treatment, the reduction in nitrogenized food, such as meat and milk, and recommends a greater proportion of fatty or oily matter. Buttermilk or sour milk may be drunk freely, but not fresh milk. As regards sleep, the epileptic should not be allowed too much sleep, as it increases the tendency to convulsions. The mind should not lie idle, and systematic education of both mental and physical powers is absolutely of paramount importance.

Dr. Saundby, in a short article on the "Treatment of Epilepsy," read before the Midland Medical Society, claims that success in the treatment of this affection depends, first of all, upon accuracy in diagnosis; and he draws the distinction very clearly between symptomatic and true epilepsy.

The most powerful and efficient remedies are the bromide salts; he prefers the potassium bromide, ten grains three times a day, which in many cases he has found sufficient. He invariably adds tincture of digitalis (Mx) to counteract any depressing effect. Attention to the diet, the use of occasional laxatives, and, as a rule, abstinence from alcohol are enjoined. If the remedy should fail to control the convulsions, the dose is to be increased, first by ten grains more of potassium bromide, then by ten of sodium bromide, and finally by ten of ammonium bromide. Oxide of zinc (gr. iij–v), with extract of cannabis Indica (gr. 1-6), is also added to each dose of the mixture when the bromides seem to be failing. The use of iron, especially its routine administration, is pronounced very undesirable, and he states that he has seen cases made worse by iron. Cases that are rebellious to the above treatment are sometimes greatly benefited by borax, as recommended by Dr. Gowers, either combined with arsenic or with oxide of zinc.

The attacks of *petit mal* and epileptic vertigo, according to Dr. Saundby, are greatly relieved by the use of caffeine and theine. It is in such cases that the bromides are useless. Nitro-glycerine was also used in two cases, with complete success in stopping the giddiness. Dr. Radcliffe also speaks favourably of coffee and chocolate in the dietary of epileptics, but does not approve of tea.

APOMORPHIA, A SAFE, CERTAIN, AND QUICK EMETIC.

Mr. Brown, L.R.C.P. of Bacup, writes :

It has occurred to me, in several cases, to have patients who have been obnoxious to ordinary emetics. The emetic has caused nausea and depression, but no emesis. A few weeks ago, two cases of this kind occurred in my practice. One was a man who had been drinking and eating indigestible food. Domestic emetics had been given, which had produced nausea and ineffectual attempts at vomiting. It occurred to me that apomorphia, used hypodermically, might succeed. I prepared a solution containing a grain of chloride of apomorphia, twenty minims of rectified spirit, and water to two drachms, of which I administered ten minims hypodermically which equals one-twelfth of a grain. In seven minutes it produced free and copious vomiting. There was no nausea, nor depression, nor intolerance of food. The other case was a man who was a total abstainer. Patient had loaded his stomach with a mass of indigestible food, which had caused acute pain in his stomach. He had tried domestic remedies without success. Pain was so severe, that I was called up at night. The other case having been so successful, I at once administered ten minims of the solution. In two minutes, without any previous nausea or warning, the contents of the stomach were violently ejected on the floor, the patient not having time to get a vessel to vomit into. This was repeated two or three times at short intervals, and the patient had speedy relief. In this case there was no nausea or bad after-effect.

From inquiries which I have made, I am convinced that the value of apomorphia, as a safe, certain, and quick emetic, is not appreciated, because not known. In cases of alcoholic and narcotic poisoning, it is a most valuable remedy, and, judging from my experience in one case, the emesis is delayed a few minutes. In cases of acute gastralgia, and convulsions in children due to overloaded stomach, apomorphia will prove a speedy cure. I have given one-sixth of a grain of the drug to children by the mouth without producing any effect whatever.—*British Medical Journal.*

SODIUM NITRITE FOR EPILEPSY.

At a meeting of the Royal Med. and Surg. Society, Dr. Ralfe claimed for Dr. Law, of Hastings (*Brit. Med. Jour.*), the credit for first recommending nitrite of sodium in the treatment of epilepsy, and for assigning his theoretical reasons therefor in the *Practitioner* (June, 1882). Sodium nitrite resembles in its action amyl and nitroglycerin—its advantage being that its effects, while slower, are more permanent. The dose should just escape producing physiological effect. The dose should be pure. Of seventeen cases thus treated three were unimproved, one was doubtful, four received slight benefit, and nine were most decidedly improved. The author drew the following conclusions : 1. Those cases in which bromides are of marked service are not suitable for the nitrite. 2. Those cases in which the bromides do not agree well will be probably found to improve under the use of the nitrite. 3. When the bromides are losing their effect, or when there is bromism, sodium nitrite is used for a change. 4. There are a class of cases of minor convulsive attacks often occurring at night in which the nitrite is decidedly useful.—*Weekly Med. Rev.*

DR. OLIVER WENDELL HOLMES ON PHYSICAL DIAGNOSIS AND SPECIALISM.

I have often felt, when seeing hospital patients worried by hammering and long listening to their breathing, in order that the physician might map out nicely the diseased territory, the boundaries of which he could not alter, as if it was too much like the indulgence of an idle and worse than idle curiosity. A confessor may ask too many questions ; it may be feared that he has sometimes suggested to innocent young creatures what they would never have thought of otherwise. I even doubt whether it is always worth while to auscult and percuss a suspected patient. Nature is not unkind in concealing the fact of organic disease for a certain time. What is the great secret of the success of every form of quackery? *Hope kept alive.* What is the too fatal gift of science? *A prognosis of despair.* "Do not probe the wound too curiously," says Samuel Sharp, the famous surgeon of the last century. I believe a wise man sometimes carefully worries out the precise organic condition of a patient's chest when a *very* wise man would let it alone, and treat the constitutional symptoms. The well-being of a patient may be endangered by the pedantic fooleries of a specialist.

ECZEMA OF THE SCALP IN INFANTS.

Dr. Lassar (*Gaz. Méd.*) employs the following formula : Salicylic acid one, tincture of benzoin two, and vaseline fifty parts. A certain quantity of this is smeared over the scalp two or three times a day, after having washed the infant's head with soap and water. To soften the crusts and facilitate the cleansing of the scalp, Dr. Lassar recommends the employment of oil containing two per cent. of salicylic acid.

ON THE TREATMENT OF WHOOPING-COUGH.

Dr. W. C. Webb thus writes in the *American Practitioner*, August, 1883:

My only design in asking the attention of the Society to the treatment of whooping-cough is to relate my experience in the use of croton-chloral in nearly two hundred cases of the disease observed during the last four years.

The lesson taught me by this experience is to the effect that croton-chloral is, with very rare exceptions, singularly well borne by children. Next, that to get the full value of the drug it must be given in decided doses—doses large enough to produce quick and marked effect. A child twelve months old will bear a grain of the medicine every four hours, day and night, or six grains in the twenty-four hours; and to get its curative effects, not less than this should be given. This during the first week. After that time the cough is usually so much relieved that the number of doses may be lessened, the drug being given say during the day only. Used in this way, that is, pushed to its full effect, I have very seldom seen a case in which the cough was not under entire control within a fortnight. And I include in this statement several excessively severe cases, complicated by convulsions and marked catarrhal difficulty.

Children from ten to twelve years old will require two grains of croton-chloral at a dose, while an adult will not often bear more than four grains repeated, as in the young child, every four hours.

The drug does not disorder the digestive organs, and by lessening the frequency and severity of the paroxysms, puts an end to troublesome hemorrhage and vomiting. Occasionally, the first few doses produce some irritation about the throat and fauces, but this soon passes off. The toxic effects of the medicine do not seem to affect the organic centres. I have more than once seen patients fall asleep under its influence while in their chairs, the respiration and movements of the heart remaining unchanged.

Croton-chloral is readily dissolved in comp. tr. cardemoms, if first the drug be thoroughly pulverized. An eligible mixture is formed by dissolving one drachm in two ounces each of tr. card. and glycerine.

I have met with several cases in which the paroxysms of cough were so severe and accompanied by such extreme gastric irritability that it was necessary to give the patient a few whiffs of chloroform before attempting to administer the croton-chloral. I have seldom found it necessary to repeat the chloroform more than two or three times. In such cases as have used the anæsthetic the very happiest effects have followed.

Of the mixture I have mentioned, one drachm of croton-chloral and two ounces each of tr. card. and glycerine, the dose is a half teaspoonful every four hours for a child two years old and under.

Croton-chloral is so expensive a medicine that I have, owing to the known efficacy of belladonna in whooping-cough, sometimes used the following recipe, and with very good results:

℞.	Croton-chloral,	ʒ j.
	Tr. cardam.,	ʒ ij.
	Tr. belladon.,	ʒ ij.
	Glycerin.,	ʒ iij.
M.	Dose. same as of other.	

I have sometimes combined the several bromides with the croton-chloral, but I never felt sure that they added in any degree to its efficacy. If one bromide was better than another it was the bromide of quinia. But I rely now exclusively on the croton-chloral in the management of pertussis. While I have never seen any unpleasant effects from this drug, I scarcely need add that in its exhibition a watchful care should be exercised, lest, for some reason, its toxic effects should manifest themselves.

INJECTIONS OF HOT WATER IN DELIVERY.

With reference to this subject, about which a good deal has been lately published, Dr. ROBERT BOXALL writes to the *Brit. Med. Jour.*, July 21, 1883:

The remarks of Dr. Beckingsale on the value of hot-water enemata in delivery, I can fully endorse. The stimulant effect of hot water on the uterine tissue, though slowly gaining ground, seems to be far from generally appreciated by the profession—far less than, from its efficiency, it deserves. I refer not only to rectal enemata, but also to vaginal and uterine injections. Indeed, I believe the beneficial effect of hot water is more readily obtained by injection *per vaginam* than *per rectum*. That such should be the case in rigidity of the os is evident; and unless fœces be present in the rectum, I give preference to vaginal injection, as being the more efficacious of the two. In *post partum* hæmorrhage from inertia of the uterus no remedy is more certain and speedy in its action, so much so, indeed, that it is a matter of surprise it should not be more generally adopted. The following case served, perhaps, more than any to impress upon me its superiority over the means in more general use.

After removing a morbidly adherent placenta under chloroform, the uterus failed to contract, and, while waiting for hot water, the hand was retained in the cavity of the uterus; supra-public pressure, with friction of the abdomen, flipping with a wet towel, all produced the same effect—local contraction of the uterus, answering to the surface of the abdomen affected, but nothing more. The administration of ergot, owing to the persistence of anæsthesia, was inadmissible. On injecting hot water, however, a general contraction took place, expelling the retained hand almost

immediately, and the hæmorrhage forthwith ceased.

As the objections which have been urged against uterine injection may be obviated, and all risk reduced to a minimum by a careful performance of the operation, the following details may be found useful.

First, with regard to the necessary apparatus, a Higginson's syringe (those made in one piece are the best) and uterine tube, furnish all that is required. From the obvious risk of lacerating the uterine tissues (one fatal case in which the tube found its way between a portion of retained placenta and the uterine wall having occurred to my knowledge), the leaden tube may, with advantage, be dispensed with, and a perfectly harmless substitute improvised by adding two or three more eyes to a No. 12 flexible Indian-rubber catheter. This can readily be adjusted to the nozzle of the syringe, and the whole packed in a small compass. Being firmly convinced that all manipulations within the uterus should be conducted antiseptically as a prophylactic measure, totally apart from its curative influence in cases of intra-uterine decomposition, I invariably add Condy's fluid to the water injected. This may be carried in the form of powdered crystals of permanganate of potash, and added to the water as required, the strength (insufficient to stain the finger-nail) being readily gauged by the tint of the solution. This antiseptic being inodorous, non-poisonous, readily portable, comparatively inexpensive, and losing its red tint, if slowly injected, only so long as there is decomposing matter in contact with it, is so suitable, that I need mention none other. The water should be of such temperature that the finger can be retained in it without producing pain.

The patient being brought into a good obstetric position, the trunk across the bed, with the buttocks well to the edge and the knees drawn up, the catheter and syringe being first filled with water, the tube can be readily passed in the following way: The point of the catheter should be taken between the tips of the first and second fingers of the left hand, and inserted into the vagina. Before proceeding further, the vagina should be flushed; the fingers then carried up to the os, acting as a guide to the point, the stem of the catheter, running along the cleft of the fingers and palm, is readily pushed onward into the uterus. The injection, like all other intra-urine manipulations, should be slowly performed, and the catheter moved from time to time, to bring the fluid injected into contact with all parts of the uterine cavity. Care should be taken, by keeping the end of the syringe beneath the water, to avoid the introduction of air. A siphon arrangement, made from a length of tubing, with spring clamp to regulate the flow from an elevated vessel, has been recommended in place of the syringe; but, though it answers very well as a permanency in the wards of a lying-in-hospital, it will be found far from easy in manipulation in general practice.

THE TREATMENT OF PRURITUS VULVÆ.

Professor N. F. Tolochinoff describes *Vracheb Vedom*, the treatment he successfully adopts in endlessly varying cases of pruritus of the female external genitals. In all cases he recommends washing of the latter two or three times daily with a weak solution of bi-carbonate of soda (half a teaspoonful in a basin of water with a tablespoonful of eau de cologne). When irritation, redness and tumefaction are only moderate, powdering with oxide of zinc and starch (1 to 6), or smearing with zinc ointment (3 ij. to ℥ j. of spermaceti ointment) are sufficient. When irritation is more considerable, and erosions and exulcerations are present, he applies, in addition, 2 per cent. carbolic colution, or ½ per cent. (℞. Plumbi acetatis, 3 j; tincture opii., 3 iij; aquæ destill. lb. j). In cases of simple eczema there are indicated Hepra's diachylon ointment, green soap, and other similar remedies. Pubic lice are best killed by the gray mercurial ointment. When pruritus is very severe, but the changes on the external genital parts are only slight, the best results are obtained from ice-dressing, smearing with carbolized oil (1 to 1), hypodermic injections of morphine, and the internal use of bromide of sodium (3 j daily). In cases of diabetic pruritus, the best means is the administration of alkaline mineral waters and salicylate of soda; the latter being useful, too, in pruritus accompanying chronic cystitis. In itching from gonorrœal urethritis, the author cauterizes the urethral walls with 10 per cent of silver solution (by means of a silver probe). In cases of pruritus from colpitis, the latter is treated by the introduction every third day, through a speculum, into the vagina, of a teaspoonful of silver solution (1 to 30), with subsequent plugging; the tampons (and solution) being left for twenty-four hours. Their removal is followed by an injection of tepid weak solutions of lead or borax. Very useful, too, is the introduction of a powder consisting of crude alum and starch (1 to 5), the powder being retained in the vagina by cotton-wool tampons. In cases of cervicitis and endometritis, itching disappears on dilatation of the cervix and an intra-uterine injection of tincture of iodine or solution of nitrate of silver. A good palliative means, in cases of pruritus from uterine and vaginal catarrh, is plugging of the vagina with hygroscopic cotton-wool (changed twice in a day), as first recommended by Dr. Gaillard Thomas.—*London Med. Record.*

UTERINE HEMOSTATICS.

By J. Braxton Hicks, M.D., F.R.S., Guy's Hospital, London.

As a small contribution to the practical portion of the subject of uterine hemostatics, I venture to make a few remarks on the mechanical kinds, which we know by the name of plugs or tents. In doing so I must be understood to refer only to

those cases where the cavity of the uterus is not sufficiently large to contain blood in quantity, the loss of which from the circulation is likely to produce anything of serious detriment.

If we go back to former practice and to text-books, we find it recommended that in case of threatened abortion with much hæmorrhage, a vaginal plug should be used. The vaginal plugs recommended are the tampon, cotton or wool, silk or cambric handkerchief, rags or sponges passed in till the vagina is filled up. An India-rubber ball also has been suggested, covered with felt or such like material. Now, even with the best management, there is much of distress to the patient in the use of the vaginal plug; and, with regard to its hemostatic effect very much uncertainty, and generally partial failure; and in the hands of the unskillful and careless there is positively no restraint of bleeding worth the mention. If at any time any good results be produced, it is rather by the reflex irritation that it causes, whereby the uterus expels its contents. It is not so very rare an occurrence that one finds, on removal of the plug, the ovum on the uppermost part of it. But, besides its palpable inefficiency, a vaginal plug, being of a porous texture, absorbs a large quantity of blood and thus conceals it from our sight; it also favour decomposition, and this, as is well known, occurs within a few hours; and thus we have a new element of danger.

Again, in many cases, when called to such a case, we have no speculum at hand; and although we may extemporize one out of card-board, book-covers, or such like material, yet, before we have thoroughly and firmly filled the vagina we must have given the patient considerable pain and distress, besides having occasion to put such pressure on the urethra as may necessitate subsequent catheterism. For these reasons, namely, the imperfection of action, pain in introduction, and danger if left in long—in other words, its general crudity, it seems to me that as a general rule the vaginal plug should, in the cases I have supposed, be discarded. And as a substitute I would urge the employment of the cervical plug as being more precise in action, as well as being capable, if we use a dilating kind, of expanding the canal for the purpose of exploration, or for the expulsion or removal of its contents.

If, then, in any case of uterine hæmorrhage where we have the conditions above alluded to, we desire, besides immediately checking the bleeding, to dilate, we can use the compressed sponge-tent; the best form of which I have found to be those made after Sir James Simpson's plan, by Duncan, Flockhart & Co., Edinburgh. These can be introduced by a long pair of forceps, and retained *in situ* by placing a piece of sponge, with tape attached, in the upper vagina. Of course, even these materials retain some secretions, etc., and tend to facilitate decomposition; but their removal and cleansing can be effected much more readily than the vaginal plug, because it requires but a small portion. The sea-tangle tent, by reason of its slipperiness, is unreliable as a plug in hæmorrhage. If we desire, however, only to plug the cervix, we can very easily extemporize a plug from materials to be found in every house. For instance, take a stick (say a flower stick) about a foot long, and taper it at one end to about the size of an uterine sound, or larger; wind round this end, for about three inches down, strips of cambric rag, lint or sponge to the required thickness, judging from the size of the os. Strips of sponge can be readily obtained from the cup-shaped sponges of compact texture, and they can be tied on by thread, layer after layer, till the requisite conical form is obtained. The strips of the other material can be laid on similarly. After the covered end has been well greased it is passed into the canal and the stick retained *in situ*, after the manner in which we tie in a catheter; an elastic tape, if obtainable, is to be preferred.

A catheter or bougie, at the end of a long injection-tube, can be treated in the same way. If we require great precision of application, then it is best that the hand should hold the external end till the hæmorrhage has ceased. If the catheter and stilet be used, then I have found it convenient to bend the external portion backward, between the buttocks, tying the tape around the ring of the stilet—the ends of the tape being carried, as usual, to back and front of the waist-band.

These more homely adaptations I have recommended, rather than the especially made kinds, because they are often wanted at times when we can not send home for a showy sort. In any case, a cervical plug, expanding or not, is more precise, less crude and painful in application, than the vaginal, and, in my experience, nearly always successful. In all cases of abortion, where a plug is necessary, I would lay it down as a rule that the expanding tent should be employed. In case of flexion with abortion (and it is this complication which so frequently increases the hœmorrhage) it will be found that the covered stick or stemmed plug, above described, is very useful: for, if the fundus be elevated during its introduction, the uterine cavity is straightened and evacuation of the contents thereby facilitated.—*British Medical Journal.*

THE USE OF ANTIMONY IN CERTAIN SKIN DISEASES.

Mr. Malcolm Morris, F.R.C. Ed., Surgeon to the Skin Department of St. Mary's Hospital, writes:—

Considering the close chemical affinity of the three important drugs, phosphorus, arsenic, and antimony, it is somewhat surprising that little use should have been made of the last in the treatment of diseases of the skin. Of the three, arsenic is the one which has gained the greatest notoriety. It has passed alternately through the phases of

great popularity—being considered by some a specific for every form of skin-affection—and of equally undeserved disrepute. Now, however, we are forming a more rational estimate of its value; and, while acknowledging its utility in a few certain, well-defined conditions, I have thought it might prove useful to bring before this Section some of the results observed during the administration of its near ally. A certain share of attention has also been paid to phosphorus, but antimony has hardly been noticed. The probable reason for this is that antimony has been looked upon as a drug to be avoided, on account of the dangerous symptoms produced by even apparently moderate doses. But the same argument that applies to arsenic, and strychnia, and other drugs, applies with equal force to antimony—that the action depends entirely on the dose employed. We find in text-books that it has two actions, in the smaller pharmacopœial dose depressant or antiphlogistic, in the larger dose emetic. But no mention is made of its alternative action in repeated small doses. The sulphide, in combination with mercury and guaiacum, is the only preparation which has been used for this purpose.

Tartar emetic, or tartarated antimony, is the preparation I have used in these investigations, the largest dose being 1-32 of a grain, or 7½ minims of the vinum, only half of the minimum dose of the *British Pharmacopœia*. I must mention that, in all cases in which the effect of the drug has been watched, little or no local treatment has been used.

I will state now, in as concise a manner as possible, some of the more important diseases in which I have used the drug, leaving a more complete and detailed account for another opportunity.

Eczema.—It is now several years since my colleague, Dr. Cheadle, pointed out to me the value of antimony in the treatment of the acute form of this disease. In the majority of the cases which have come under my care, its beneficial effect has been both marked and rapid. In the acute general eczema of adults, which usually commences somewhat suddenly by heat and burning on the flexor surfaces, and on other characteristic positions, and is soon followed by abundant exudation of clear fluid, and in the form known as eczema rubrum, I generally begin with four or five minims of the vinum antimoniale three times a day, increasing the dose gradually up to seven minims. After a few doses the exudation ceases, and the local irritation is much relieved; but, in order to prevent a relapse, it is necessary to continue the treatment until all traces of the eruption have disappeared. In acute eczema of children, the dose should be in proportion to the age of the child—half a minim or less up to six months, and one minim or less up to a year. As a rule, I have found both children and adults bear these quantities well, neither sickness nor diarrhœa being produced. In the case of aged persons, however, the dose should not exceed three or four minims to begin with, as diarrhœa may result from the administration of a greater amount.

In the subacute forms, both of children and adults, similar doses, but continued for a longer period, are necessary. In chronic eczema, especially when localised, the use of antimony is less often successful; but even in this troublesome form it relieves the acute exacerbations, and is occasionally followed by cure when other methods of treatment have failed.

In eczema impetiginodes of children I have noticed little benefit from the drug till the scabs have been removed, and formation of pus checked by local treatment. Simple impetigo contagiosa from a local cause is not included in this category.

In the various forms of so-called lichen that occur in children, I have found antimony in the previously mentioned doses of the greatest value in relieving the irritation—a feature in which it resembles arsenic.

Erythema.—In most of the cases of erythema met with in practice the eruption disappears without any special treatment; occasionally, however, when the disease is continued by fresh outbursts, antimony is of great service in modifying the course and relieving the burning and heat. There is a condition which is not clearly described, either in special books on the skin or in those on general medicine, that I have found to be greatly benefited by antimony, whereas it is aggravated by arsenic. The attack usually commences suddenly, with heat and burning of the skin of the face, which is followed very rapidly by great swelling, that often involves the eyelids. The smarting is severe, and pain is experienced when the part is touched. Occasionally, vesicles or bullæ are formed on the swollen and inflamed skin. The patient feels ill, but there is no special rise of temperature. The disease usually runs its course in from three or four to ten, or even twenty, days. The chief feature of the disease is that it is almost certain to relapse. By some authorities this is considered to be idiopathic erysipelas—the public always call it so; by others, it is looked upon as a peculiar form of eczema, and said to be associated with gout. I have seen several cases, and am inclined to think it may be called relapsing erythema, as it has none of the dangerous qualities of genuine erysipelas. Antimony acts in this disease as in acute eczema, by shortening the attack and diminishing the severity of the symptoms. It should be continued for a considerable time after recovery, to prevent, if possible, a relapse.

Prurigo.—In this troublesome affection, frequently met with in our out-patient rooms—the relation of which to the severe form known on the Continent as Hebra's prurigo, Mr. Morrant Baker pointed out at the International Congress of 1881—antimony is of great use. Three or four minims of the vinum, continued over a long period, allays the itching to a large extent, and often prevents the relapses of eczema. In several cases, after arsenic, iron, iodide of iron, cod-liver oil, and

numberless other tonics had been tried, antimony was the only drug that produced any benefit whatever. When given in the before-mentioned doses continuously for more than a year, I have never seen sickness, diarrhœa, sweating, or debility; but, on the contrary, the appetite improves and the weight increases. I have not had the opportunity of trying the remedy in a patient older than 18½ years suffering from this disease; but in one particular case of that age, the benefit was most marked while the drug was being taken.

Sycosis.—I have given antimony in five well-marked cases of this disease; in four, it did not seem to produce any effect, either beneficial or otherwise; in the fifth, there was considerable improvement after the vinum had been taken a fortnight in seven-minim doses. It seemed to relieve the pain and burning; but, although the remedy was persevered with for over three months, the improvement was only temporary. The local treatment while the drug was being administered was olive-oil or vaseline. In none of these cases was there any bad effect; no depression, diarrhœa, sickness, or sweating.

Urticaria.—In a few cases of chronic urticaria, I have found antimony, like arsenic, of service in checking attacks, so long as the remedy was continued.

Psoriasis.—Though, in the majority of cases of psoriasis, arsenic is to be preferred to antimony, I have elsewhere called attention to the fact that, in certain persons, arsenic not only fails to relieve, but even aggravates the disease. I have, in some of these cases, tried antimony, and have noticed in a few instances that improvement took place, while in others it seemed to have no effect.

I have been obliged to condense the facts in this paper into very brief space, but two points I wish especially to lay stress on: first, that tartar emetic—in doses of $\frac{1}{240}$ to $\frac{1}{32}$ of a grain, according to age—can not only be tolerated, but seems to have a decided tonic action; secondly, that it proves useful in those acute forms of skin disease that are usually aggravated by arsenic.—*British Medical Journal.*

NOTE ON DISINFECTANTS.

Dr. W. E. Buck writes: Most practitioners must have often realised the inefficiency of disinfectants in allaying the fœtor of cancerous ulcers, an annoyance which sometimes troubles patients even more than the pain, or the thought of death. I have used the whole round of disinfectants for cancerous ulcers, but all have failed in allaying the fœtor, and keeping the ulcer clean. The disinfectants tried were carbolic acid, sanitas, terebene, resorcin, creasote, boroglyceride, chloride of zinc, charcoal, etc. After failure with these, I tried a saturated solution of hyposulphite of soda added to an equal quantity of water, and found it exceedingly efficacious. The ulcerating surface was well syringed and washed with the solution, and was then covered with rags steeped in the solution. The granulations were kept clean, and the fœtor was well kept under. Most disinfectants seem to lose their virtue after a few days' application, but I have used this one for months in the same patient with continuous good effects. It is cleanly, has no smell, does not stain, and is very cheap.—*British Medical Journal.*

REMOVAL OF PLASTER-OF-PARIS BANDAGES.

Dr. F. H. Murdock, of Bradford, Pa., says: A very convenient way to remove a plaster-of-Paris bandage is as follows: Take a strong solution of nitric acid, and by means of a camel's-hair pencil paint a strip across the bandage at the most desirable point for division. The acid will so soften the plaster that it may be readily divided by means of an ordinary jack-knife.

THE CANADA MEDICAL RECORD

A Monthly Journal of Medicine and Surgery.

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SUBSCRIPTION TWO DOLLARS PER ANNUM.

All communications and Exchanges must be addressed to the Editors, Drawer 356, Post Office, Montreal.

MONTREAL, NOVEMBER, 1883.

YELLOW FEVER AT PANAMA.

A private letter from Dr. Wolfred Nelson, of Panama, South America, reports the continued presence of yellow fever here. It appeared in June last, when there was a single case fatal; in July out of seventeen cases eleven died; in August there were three deaths; in September four; October one case fatal. In November, up to the date of his letter, the 21st, there had been five cases, two deaths, one convalescent. Of the remaining two, one was malignant—death certain, one a mild case. The disease had been of a very malignant type. The death rate being over 60 per centum.

The season was very irregular; instead of the usual heavy rains of tropical winter but little

rain was falling, and that fitfully alternating with great heat. November is always a very trying month in the Isthmus, it being the last month of the winter, the dry season or summer commencing in December.

Owing to the vast amount of work going on, on the canal, such as the excavating of earth, swamps, etc., an immense amount of fever-producing material is being disturbed, all of this *plus* the presence of an immense staff of canal officers, and other unacclimated people in the Isthmus, and the indescribable filthy condition of Colon, Atlantic side, leads thinking physicians to anticipate that the disease will appear in an epidemic form.

Dr. Nelson during his residence in the Isthmus has experienced the disease himself in a severe form. He has promised the RECORD a series of letters on its various types, such as the malignant, severe and mild.

He further states that Drs. Girard, Didier, and Acoullot of the Canal staff, are conducting a series of experiments, à la Pasteur, and that their researches, clinical, pathological, and experimental, will appear in due time.

MEDICAL SOCIETY OF MONTREAL.

The Society held its annual meeting on the 26th October, and elected the following officers: President, Dr. C. M. Filiatrault; 1st vice-president, Dr. N. Fafard; 2nd vice-president, Dr. J. I. Desroches; secretary-treasurer, Dr. H. E. Desrosiers; assistant secretary-treasurer, Dr. Aimé Trudel; council, Drs. A. Lamarche, A. Dagenais, J. W. Mount, G. Archambault, and L. J. V. Cleroux.

SIR ANDREW CLARK, BART.

The many friends, in Montreal and throughout Canada, of this distinguished physician, who accompanied the Princess Louise and the Marquis of Lorne to Canada in 1878, will learn with pleasure that Her Majesty has conferred on him a Baronetcy.

REVIEWS.

P. Blakistons & Son's Visiting List, for 1884, *late Lindsay & Blakiston's.* Philadelphia.

This, the oldest of visiting lists, has reached us in good season, and maintains its excellent reputation.

PERSONAL.

Dr. Brodie (M.D. McGill, '77), of Honolulu, Sandwich, and formerly assistant Demonstrator of Anatomy in Bishop's College Faculty of Medicine, was in Montreal early in November, on a brief visit to his friends.

J. J. E. Maher (M.D. McGill, 1883), has been appointed a District Dispensing Physician in New York.

Dr. F. J. D. Tetreault (M.D. Bishop's College, 1879), of Orange, N.J., U.S., was in Montreal, the end of November, on his bridal tour.

Dr. Jackson has become Dean of the Medical Faculty of Laval University, Quebec, in place of Dr. Jas. Sewell, deceased.

Dr. Chas. Verge takes the chair of Practice of Medicine, in Laval University, Quebec, held by the late Dr. Sewell.

Dr. P. Wells replaces Dr. Charles Verge in the chair of Materia Medica, Laval University, Quebec.

Dr. D. Brochu, replaces Dr. Wells in the chair of Hygiene, Laval University, Quebec.

Dr. F. W. Borden, of Canning, N.S., has been appointed surgeon to the 68th (King's County) Infantry.

Dr. Picault of Montreal was recently tendered a banquet by the French Societies of this city on the occasion of the 50th anniversary of his arrival in Canada from France.

OBITUARY.

THE LATE DR. E. H. TRUDEL.

We chronicle with much regret the death of Dr. Trudel, which took place in this city on the 5th of October. The deceased gentleman was born in 1820, and pursued his education at Nicolet College, entering medicine at McGill College, at which University he took the degree of M.D. in 1844. Early in the history of the Montreal School of Medicine and Surgery (Victoria College Faculty of Medicine) he became connected with it, and for years, up to the period of his death, has filled the chair of obstetrics. He was also one of the representatives of the school on the Board of Governors of the College of Physicians and Surgeons of this Province. Dr. Trudel occupied the leading position among our French Canadian *confrères*, and his death leaves a blank which cannot be readily filled.

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VOL. XII. MONTREAL, DECEMBER, 1883. No. 3

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Original Communications.

CASE OF PUERPERAL CONVULSION.

By A. LAPTHORN SMITH, B. A., M.D., M. R.C.S. Eng., Professor of Botany Medical Faculty University of Bishop's College.

(Read before the Medico Chirurgical Society of Montreal.)

MR. PRESIDENT AND GENTLEMEN.—The interest evinced in the very able paper lately read before the Society by our esteemed *confrère*, Dr. Armstrong, onsome cases of Puerperal Eclampsia induces me to submit for your consideration the following case of the same disease, which occurred some months ago in my practice. Mrs. L., æt. 32, married one year, who had engaged me to attend her in her first confinement, consulted me at my office on the 22nd July. She was a dark, thick-set, rather stout woman, of active habits and enjoying a good appetite. Before her marriage she had suffered for many years from severe dysmenorrhœa, which nothing had relieved until she became pregnant, since which she had become entirely free from pain. Since her marriage she had been in constant fear, almost amounting to dread, that she would never get over her confinement, which anxiety I had considerable difficulty in allaying. She was then at about the 7th month of pregnancy.

She came to me on the above date, complaining of headache and pain in the back, which were so severe as to prevent her from sleeping; also of numbness on the right side. I gave her a mixture containing bromide of potassium and hydrate of chloral, and some directions as to diet, as her tongue was coated and bowels confined. Her vision appeared normal, and she thought that her water was all right.

Next day, however, the 23rd July, she returned to my office, stating that she felt quite silly; that she called things by the wrong name, and that everything seemed to be upside down. She had vomited several times, complained of increased headache, and of severe pains in the lower part of her belly, accompanied by strange movements, different from those formerly caused by the child, which I presume were uterine tenesmus. She also complained of painful and frequent micturition, and that the urine was very scanty and high colored. I now perceived that her feet were swelled, and her eyelids puffy; and on examining her urine, some of which I had told her on the previous day to bring, found it loaded with albumen.

I sent her home at once, ordered a fly-blister to the back of her neck and to eat or drink nothing but milk.

A few hours later I was sent for in great haste, being informed that she had had a fit, and was apparently dying. On reaching her I found her quiet but comatose, with stertorous breathing. The fœtal heart could not be heard. On examination the os uteri was found to be dilated to the size of a quarter dollar, the head presenting.

While I was there she had another seizure, during which she became black in the face, and nearly every voluntary muscle in the body was in a state of clonic convulsions. This was speedily arrested by the administration of a mixture of alcohol, chloroform and ether. She, however, remained perfectly unconscious, having recurring seizures until the evening, when her condition was so alarming that I felt disposed to dilate the os and deliver with the forceps. But, before doing so sought a consultation with a senior *confrère*, who advised me to let the uterus alone, and to apply twenty leeches to the temples, instead. This was done at 9 o'clock, the convulsions being, in the meantime, controlled by anæsthetics. Almost as the last leech fell off she recovered consciousness, and gradually continued to improve without any untoward event. I however kept her in bed, and ordered her to continue with a strictly milk diet for several weeks, during which time the albumen in the urine decreased very rapidly, and the headache completely disappeared.

On the 19th Aug., just four weeks from her convulsions, I was sent for and found her in labor, but there were no signs of life in the child. While rupturing the amniotic sac, my finger went through the scalp and membranes of the brain, which latter oozed completely out, in a very decomposed state, rendering, for a time, my lot by no means a happy one. After a labor of five hours she was delivered of a decomposed seven months' fœtus.

She made a good recovery, and is now apparently none the worse for her adventure.

My object in bringing this case before you is to make especially prominent two features in the treatment—one being the method of bleeding and the other the therapeutic action of a rigorous milk diet.

First, as to bleeding, there seems to be a great difference of opinion among writers as to the propriety of removing blood, those who are most opposed to it generally believing that the disease depends upon a hydræmic condition of the blood or, at any rate, an anæmic condition of the organs nourished by it. I am not of the latter opinion as, to my mind, there is greatly preponderating evidence that the disease is due to the retention of urea in the blood ; and I therefore think that we can find in the kidneys the whole source of the disease; although any disease of the kidneys which causes albumen to be excreted is always accompanied with more or less hydræmia or anæmia. In the post-mortem notes of nearly every case of fatal puerperal eclampsia we find that the kidneys were in a more or less advanced state of inflammation and *that the veins were dilated.*

In my case the application of twenty large leeches produced a marked effect, immediately putting an end to the coma.

Whether this result was due to the abstraction of so much blood, and with it so much poisonous urea from the whole circulation, or whether it was due to local depletion I cannot say ; certainly, twenty leeches can remove a large amount of blood, and, being an uncompromising compromise between venesection and no bleeding at all, I would respectfully recommend this method of removing blood.

And here let me express my belief that the albuminuria, uræmia and disease of the kidneys in pregnant women will be found to be due to venous congestion of those organs caused by the obstacle which the gravid uterus pressing on the renal veins offers to the return of blood from the kidneys. I think that this opinion is borne out by this fact, that puerperal eclampsia is proportionally frequent as the women advance in pregnancy. The second point I wish to emphasize is the milk diet. It has long been advocated in the treatment of Bright's Disease by Dr. Donkin of Sunderland, in a series of papers in the *Lancet*, but its adaptation to puerperal eclampsia is the special object of this paper. In one of the articles referred to he says : " In order to fully appreciate the therapeutic action of milk in Bright's Disease we must fully understand the pathological conditions pertaining to this disease. The kidneys are provided with a double capillary system, namely, a primary set of capillaries forming the malpighian tufts, and a secondary set formed by the ramification of the efferent vessels of the malpighian tufts into a net-work of fine vessels distributed between and around the convoluted uriniferous tubules. In the second place, the kidneys are completely invested each by a firm, fibrous coat, or capsule, of a very unyielding nature." So that, anything preventing the free return of blood from the kidneys would result in pressure on the uriniferous tubules, bringing on alteration in their structure and functions.

The effect of the continued drain of albumen from the kidneys is to impoverish the blood to such a degree that its albumen is reduced in some instances to as low as 16 parts in a 1000, the healthy proportion being 60 to 70 parts in a 1000. By this serious deprivation of albumen the specific gravity of the blood serum is lowered from 1028, its

average in health, to 1013 in some instances. This hydræmia or watery state of the blood rapidly destroys the red corpuscles, producing anæmia and general dropsy, aided, no doubt, by the fullness of the vascular system from the diminished withdrawal of water by the kidneys. Lastly the diseased epithelium of the uriniferous tubules only partially secreting the solid constituents of the urine the blood becomes poisoned with urea, and convulsions or coma come on.

The first appreciable action of skim milk, taken to the extent of six or seven pints daily, is that of a most energetic diuretic, a profuse flow of urine being rapidly produced, which flushes the uriniferous tubules and washes out the casts and debris of epithelial cells, by which they are blocked and distended. Healthy epithelium is developed in the tubules, and the urea is excreted. Moreover, says Dr. DONKIN, the administration of milk causes the immediate absorption into the blood of a large quantity of albumen specially prepared in the laboratory of nature for assimilation and nutrition, so that the blood soon regains its normal specific gravity, and the reabsorption of the dropsical effusion follows as a physical consequence, according to the law of osmosis. Ordinary diuretics, while producing the same result, labor under the disadvantage that they contribute nothing towards restoring this nutritive quality of the blood. It is important that the milk be skimmed, as it is of greater specific gravity than unskimmed milk, and also on account of its being less liable to cause diarrhœa. Constipation is a sign that the milk is being digested, and can be easily remedied by mild laxatives. It may be given warm or cold, but in no case should it be boiled.

Dr. DONKIN has cured a large number of unenumerated cases of disease of the kidneys of various kinds with this treatment alone, and his testimony has since been corroborated by many of the leading authorities of Edinburgh and London. And although there may be differences of opinion as to why pregnant women should be so liable to convulsions and coma there can be no question about these latter being due to uræmia from disease of the kidneys.

Gentlemen, I will be glad to hear from any present who may have tried an *exclusive* skimmed milk diet in diseases of the kidneys, while to those who have not tried it I would strongly recommend it, with a promise that, in cases of the earlier stages of kidney disease, they may be certain of success.

I would like to ask Dr. Osler, through you, whether the experiment of tying or compressing the renal veins has been tried, and if it would produce uræmia.

Society Proceedings.

MIDICO-CHIRURGICAL SOCIETY OF MONTREAL.

Stated Meeting, Nov. 9th, 1883.

DR. RODGER, PRESIDENT, IN THE CHAIR.

Division of Femoral Artery.—A specimen illustrating a somewhat novel source of injury was sent to the Society by Dr. A. Henderson, of Calgary, N. W. Territory. The deceased from whom the specimen was taken was a cow-boy in the employ of the Stewart Ranche Company and was employed in killing cattle for the C. P. R. construction twenty miles west of Calgary. He was in the habit of carrying his knife unsheathed, hanging to the horn of the saddle, and while taking aim at a steer with his rifle, his horse becoming restive, he raised his leg to steady himself when the point of the knife pierced his left thigh about its middle and to the inner side. Profuse hemorrhage followed, which proved fatal within an hour. A dissection of the part shewed that the femoral artery had been divided a short distance above where it pierced the adductor magnus muscle. As seen by the specimen, the artery was completely divided by a clean cut, while the vein lying alongside failed to give evidence of the slightest scratch.

Dr. Osler exhibited the following pathological specimens:—

Cancer of Liver, with much-enlarged Glands.—Dr. Phelps, of Chateauguay, N. Y., sent this specimen to Dr. Osler with the following history: "Three years ago the patient, a woman, aged 27, noticed a bunch protruding at ensiform cartilage, which enlarged slowly. Was treated with blisters and escharotics. As it still grew she consulted me last spring. I found a nodulated tumor extending from the ensiform cartilage midway to umbilicus, and about eight inches wide. It pressed firmly against the margins of the ribs and was but slightly moveable. It seemed to be covered by skin only. Percussion gave a tympanitic note over its whole extent. It could be grasped at lower margin and moved freely, but seemed to be attached at the ribs. Up to this date she enjoyed good health, had no pain, only a sense of fullness. Was at a

loss for a diagnosis, so sent her to Dr.——, of who said it was an enchondroma of the ensiform cartilage which extended between the sheaths of the rectus muscles. He advised extirpation if it continued to enlarge. In June I was sent for to perform the operation, the messenger stated that another enlargement had appeared further to the right. Drs. Bates, Gay and Furniss, of Malone, accompanied me to her residence, where we proceeded to administer ether in order to carefully examine, so as, if possible, to determine whether the disease was extra or intraperitoneal. We discovered not only the large right side of the liver but the large mass which proved to be the enlarged mesenteric glands. It is not necessary to say that the operation was deferred till after the patient had climbed the "golden stairs," which took place October 25th, 1883. Dr. Furniss and myself performed the *post mortem*. Skin was cachectic, limbs bloated and abdomen enormously distended. We removed about 40 lbs. of serum from the abdominal cavity. Over the tumor the abdominal walls had been all absorbed excepting the skin and peritoneum. The growth was not adherent in front. The stomach and transverse colon were both underneath of, and attached to, the left lobe of the liver. The pancreas was healthy, the kidneys, ovaries and uterus normal. The thorax was not opened. The disease began as a cancer in the left lobe of the liver, pressing forward and downwards, absorbing the abdominal walls and making its appearance at the ensiform cartilage as a nodule. Its overlapping the stomach and colon accounts for the tympanitic note on percussion. The enlarged mesenteric glands and right lobe of liver made up the second tumor felt by the patient. Death evidently took place from suffocation caused by over-distension with fluid.

Fibroid Disease of the Stomach.—This specimen was sent to Dr. Howard by Dr. Powell, of Ottawa. It was removed from a man aged about 60, not intemperate, but a good liver. He had consulted several doctors who all inclined to a diagnosis of scirrhus of the stomach, as the symptoms pointed that way. The stomach was contracted and much thickened, owing to fibroid deposit in the mucous membrane and muscularis.

Laceration of Brain.—This specimen was removed from an hospital patient, a lumberman, suffering from an enlarged spleen and leukæmia for over a year. While in hospital he appeared to be doing well, when one night he suddenly became comatose and died in a few minutes. The *post-mortem* revealed extensive laceration of the brain substance from hæmorrhage.

Ovarian Cysts in an Infant.—Taken from a child of ten weeks shewing cystic disease of both ovaries.

Dr. Alloway exhibited a "Jannison's Uterine Irrigator," which he had been using for some time past, and which had given him more satisfaction than any other instrument devised for the same purpose. It consisted of a flexible metal tube, so bent that it formed a third arc of a circle, the diameter of which latter was twelve inches. On the outside of this tube ran another of much larger calibre, but not so long, the space between the tubes answering the purpose of providing for an immediate return-stream from the uterus. He related the history of a patient who, having expelled a 2½ months' decidual mass into vagina received an intra-uterine injection of warm carbolized water from a fountain syringe, armed with an ordinary hard rubber tube, which did not admit of the immediate return of the fluid. About ¾ of an hour after injection the patient was seized with pain over the region of the left broad ligament, chill and faint feeling, followed by elevation of temperature (102° F.) and pulse 110 and severe paroxysmal attacks of dyspnœa. After the administration of a hypodermic of Battley she recovered from pain and symptoms. Dr. Alloway attributed the condition of his patient to the entrance of the solution for a short distance of the left Fallopian tube, that slight hyperæmia of the delicate lining of the tube would follow the irritant, and in this way account for the pain and other reflex nervous symptoms manifested. He did not think the symptoms due solely to distension of the uterine cavity by the fluid, as there was no expression from the patient of even discomfort at time of injection. He though it of little importance what term would be used to designate the condition; it was the cause of the apparently alarming symptoms which were of interest to him, and which he thought resulted from the use of a tube which did not provide for an immediate return-stream from the uterus. He had injected the uterus under the same circumstances, many times before, with the same kind of imperfect tube, but had never witnessed such a condition. He thought probably it would be well to limit injection in such cases to those in which the discharge were fœtid; and this was one reason why he brought this ex-

perience in the matter before the notice of the Society; with Jannison's tube, however, he would feel perfectly safe under all circumstances.

Axis Traction Hook.—Dr. Alloway also exhibited an "Axis Traction Hook" of his own device. He claimed that the hook answered all the purposes of Tarnier's instrument when passed into the lock of any ordinary forceps and traction made by the hook alone. Traction could be made in any direction pleasing to the operator, and the hook could be used in this way whether the head was arrested at the brim or low down in the cavity of the pelvis. Dr. A. used the hook almost solely with Simpson's short forceps, and found that the handles of the forceps and those of the hook came when applied into such convenient relationship, that more power, if necessary, could be exerted, than with Simpson's long forceps, without the hook. Dr. A. related the history of a very interesting case where he first used the Traction Hook. The patient had been, some eighteen months before, operated on by Dr. Roddick for the removal of a large ovarian cyst (40 pounds). The walls of the abdomen, so far as the muscular structures were concerned, did not unite, or the line of union had become absorbed, and allowed an enormous ventral hernia to take place. When seen at three months' gestation the whole of the intestines and loose adnexa came down in a horn-like pouch between her legs. They had to be replaced and sustained by a suitable truss. During labor almost complete anteversion of the uterus would take place at every pain, and the condition was quite uncontrollable. The axis of the pelvis and that of the uterus were almost at right angles to each other, so that the patient could never have delivered herself unaided. Dr. A., though a firm believer in Tarnier's principle, alluded to the great cost, complex nature, difficult application, and trouble of keeping clean, of Tarnier's forceps, which would tend greatly to prevent the instrument coming into anything like general use. That his simple inexpensive instrument would in many instances prove serviceable when Tarnier's instrument was not at hand.

Dr. TRENHOLME quite agreed with Dr. Alloway as to the uselessness of the first tube he spoke of, and that he had done well to cast it aside. Dr. Trenholme, however, would go further, and maintained that to inject the uterus, using any manner of tube after the contents had escaped into the vagina and been removed, was an unwarrantable proceeding, and fraught with danger, as the case related shewed. Uterine irrigation was seldom called for, and ought not to be resorted to, save when the decomposing contents, as revealed by the offensiveness of the discharges, shewed that there was danger of putrid absorption. Dr. Trenholme's experience in abortions enabled him to speak decidedly on this subject.

Dr. TRENHOLME said that the instrument exhibited by Dr. Alloway did not afford one single advantage possessed by Tarnier's forceps. In the first place traction by Dr. Alloway's hook was made at the lock, far from the points or blades, and then the shortness of the handles gave no power to engage the head in the axis of the brim as could so easily be done by Tarnier's. For his part he had used the Hodge modification of the long French forceps in all high operations with ease and success in cases where delivery by the forceps was warrantable; for we must not forget that there is a limit to the force which cannot be expressed. With the patient on her back and these long forceps, we can with perfect ease engage the head in the brim. The left hand sustains the handles, while the right hand over the lock brings down the head with all the force we would be warranted in using. When this fails, turning should be resorted to so as to open the shortest diameter of the child's head to the antero-posterior diameter of the mother's pelvis.

Dr. CAMPBELL said that the uterus after abortion very seldom needed washing out. Has known colic to follow an injection into the vagina for leucorrhœa. Once saw serious symptoms and death follow an injection in a woman who had recently been confined.

In reply to Dr. Trenholme, Dr. ALLOWAY felt from his experience in the case recited that if there was no fœtor to be detected in the discharge, and if a uterine tube similar in design to Jannison's was not at hand, it would be better not to inject at all. But if there was evidence of decomposition within the uterus, he would recommend the use of such a tube as the one he used, or, better, a common elastic catheter. The solution he was using at present was $\frac{1}{2000}$ parts of corrosive sublimate.

Obstetrics.—Dr. TRENHOLME related the following case:—Was sent for last Monday by a *confrère* to a woman in labor with her third child. Two physicians had failed to deliver with the forceps. He found the os fully dilated; antero-pos-

terior diameter at brim was 3¼ inches. Had had a natural labor with her first child; the second had to be delivered with forceps. Dr. T. found the child was lying diagonal to the abdomen. He proceeded to turn, his hand first feeling the promontory of the sacrum bulging out; there was also hour-glass contraction a little above the os, and again near the fundus, which caused great difficulty in moving the child. However, after some time he succeeded in delivering all but the head, which Dr. Armstrong opened, as by no safe efforts could it be loosened. Dr. T. said the trouble was caused, not so much by the deformity, as by the two spasmodic contractions. He had seen a similar case before, where, from repeated powerful attempts to deliver with the forceps, the uterus around the os was bruised into a pulpy mass causing the death of the woman.

Dr. CAMERON had seen a case something similar, requiring evisceration, owing to ergot having been wrongly used to hasten a tedious labor from early escape of liquor amnii. No amount of traction was of any avail.

Dr. ALLOWAY thought that cases where the waters broke early and caused spasmodic contraction on the child were not very unusual.

Dr. ROSS thought the cause in Dr. Trenholme's case was obscure. He did not believe that spasm alone could resist strong efforts at traction, especially as the head was found very large. He thought it should hardly be called hour-glass contraction. Had only seen two cases of hour-glass contraction, and in both it was after the birth of the child, and where the placenta was retained above.

Dr. TRENHOLME replied by saying that he thought it not unreasonable to put the difficulty down to spasm, as in his previous case the woman had plenty of room, yet was unable to deliver with forceps on account of spasm gripping the child.

Dr. RODGER agreed with Dr. Ross that other causes appeared to be present to account for the difficulty.

The following resolution of condolence was passed by the Society, to be sent to the family of the late Dr. Trudel:—

"That this Society desires to express its sense of the great loss sustained by the profession and society generally in the death of Dr. E. H. Trudel, whose long and honorable career as a man and physician secured to him the consideration and esteem of the citizens generally, and whose high scientific attainments and facile mode of expression enabled him for many years to fill the chair of Obstetrics in the Montreal School of Medicine with distinction to himself and advantage to the students."

UNIVERSITY OF BISHOP'S COLLEGE.

ANNUAL DINNER OF THE FACULTY OF MEDICINE.

The Annual Dinner of the Medical Faculty, graduates and under-graduates of the University of Bishop's College was held in the ladies' ordinary of the palatial Windsor Hotel on the evening of the 12th of December. It was, according to the daily press, a most successful affair, a large number being present. The tables were very neatly decorated with natural flowers. Shortly after eight o'clock the guests entered the dining-hall and took their seats, amid the enlivening strains of Gruenwald's orchestra, who furnished excellent music during the evening. The chair was occupied by the Dean of the Faculty, Dr. F. W. Campbell, who was supported on the right by the Hon. L. O. Taillon, Dr. Hy. Howard, Mr. Alex. Milloy, and Mr. F. E. Nelson, and on the left by U. S. Consul-General Stearns, Dr. Osler, Ald. James McShane, M.P.P., and Mr. Albert D. Nelson. Prominent among the others present were Drs. Trenholme, Rodger, Guerin, Perrigo, Wood, Cameron, A. Lapthorn Smith, H. L. Reddy, Proudfoot, Simpson and Armstrong and Rev. Mr. Saunders.

A most *recherche menu* had been provided for the occasion, and was done full justice to, the service, as is usual at the Windsor, being of the very best. The *menu* programme was of a very tasteful and elegant design, and neatly printed—a view of Mount Everest being on the frontispiece.

The arrangements, which were most satisfactory, were under the direction of the following committee:—

Chairman—F. W. Campbell, M.A., M.D., L.R.C.P.L.

Vice-Chairmen—D. D. Gaherty, C.M., M.D., C. D. Ball.

Hon. Secretary—C. A. Wood, C.M., M.D.

Secretary to Committee—F. R. England.

Committee—J. C. Cameron, M.D., C.M., M.R.C.P.I.; H. L. Reddy, B.A., M.D., L.R.C.P.L.; D. D. Gaherty, C.M., M.D.; W. McDonald, C.M., M.D.; A. Kerry, C.M., M.D.; N. S. Nichol, W. E. Fairfield and A. F. Longeway.

After dinner, the Chairman rose, and, after extending a hearty welcome to the guests present, he called upon.

The Honorary Secretary, Dr. Wood, who announced letters of regret from Mr. Hugh McLennan, Chancellor Heneker, Mr. George Macrae, Q.C., Rev. Dr. Norman, Dr. Gibson

(Cowansville), Hon. Mr. Justice Brooks (Sherbrooke), Dr. J. Baker Edwards, Dr. E. A. Duclos (St. Pie), Dr. Gravely (Cornwall), Dr. Mitchell (Bedford), Mr. Thos. White, M.P., Dr. Spendlove, (Magog), and Dr. R. P. Howard, Dean of the Medical Faculty of McGill University, and others.

After the usual preliminary toasts the Chairman gave, "The Dominion and Local Goverments."

Hon. L. O. Taillon, Speaker of the Quebec House of Assembly, in responding, made an eloquent speech in French. He thanked them for the kind invitation to be present. He had often heard that doctors differed more than lawyers. He had never before had a chance of verifying this belief, but he from this night out could refute any such accusation. He had never observed such cordiality as was evident here to-night. Much of this was, no doubt, due to the smiling presence of the Dean. (Applause.) He eulogized the noble calling of the medical man, with all his privileges, which enabled him to wield so great an influence. The study of medicine seemed to bring out all the nobler qualities of the heart. It was well that it was so, for they were often called upon to show great sympathy. (Applause.) Nowhere did doctors wield greater influence than in the Legislature of our country. The Legislature did a great deal for the profession in protecting it from charlatans and other enemies of the profession. He maintained that the Quebec Legislature looked well after the interests of the affairs of the province. He admitted that it was the most difficult province to govern; but he held that it must and should be governed by the Local Government—if not by the present party in power, then by those who should succeed them. He wished Bishop's College every prosperity in the honorable career in which it was progressing, and also for the individual members. He urged them to aim high and work hard, and success would crown their efforts. (Loud applause.)

Ald. James McShane, M.P.P., also responded, and expressed the great pleasure which he felt at being present on this occasion. If there was anything which he could do as a member of the Provincial Legislature for the medical profession he would be only too glad to do so. He had been opposed, while a candidate for the suffrages of the people, by the merchants and by the lawyers, but, he had never, he believed, been opposed by the doctors. (Laughter and applause.) He concluded by singing a humorous song, the company joining in the chorus.

Dr. Trenholme, in proposing "Our Alma Mater," referred to the beginning of the College in 1872, when the Medical Faculty began with a class of one, but now they had a class of 50. (Applause.) Already the graduates of the University had gone forth and taken their place in the world, and one of them was about to go to a distant clime. He regretted the absence of Chancellor Heneker, who took such a deep interest in the success of the Medical Faculty, and, in fact, education in general, and also of the Rev. Dr. Norman.

Dr. Campbell, in the absence of Chancellor Heneker, responded.

Mr. C. D. Ball, a fourth year student, in a neat speech gave the toast of the Dean and Professors. He said he was proud to be a student of Bishop's College, and assured all that he had selected his Alma Mater after due consideration; and now as his term of pupilage was soon to end, and looking back over the past four years, he was satisfied that his choice had been a wise one. He referred to the clinical advantages possessed by Montreal in her noble hospitals; but, while admiting that the division of the classes according to years as made this session at the General Hospital was a great advance, he yet felt that something more was needed. The overcrowding of students in the wards was not conducive either to comfort or knowledge, and this must be remedied—or the full advantages which ought to be got will not be obtained. This was a matter of much moment, and, as a student, he commended the subject to the earnest attention of the Hospital authorities. He referred in appropriate terms to the cordiality of feeling which existed between the students and the Faculty of Medicine and to the interest which the graduates, now scattered all over the world, took in the success of their Alma Mater.

Dr. Armstrong, Professor of Physiology, responded; he said:

On behalf of the Faculty I thank you most sincerely for the kindly words which you have given expression to. You have daily proof that we, as a Faculty, believe in hard and persistent labor, and to-night we show you that we also believe in recreation in the true meaning of the word, believing that by a mixture of the two, better and more lasting results are achieved than by either alone. As the bow never unstrung soon loses its elasticity, so the mind constantly kept strained to its utmost tension in any one direction soon loses its power of responding readily to the many objects of interest

which surround it. The Medical Faculty of the University of Bishop's College are conscious and proud of the fact that their students are doing good work. The medical students of Bishop's College are throwing themselves in a whole-souled way into their work of preparing for a life of usefulness in a sphere than which, perhaps, there is none larger or more noble. And I would like just here to say to the students of to-day that Bishop's College will not forget you as soon as you have graduated from her walls; we are watching with pride our graduates, who, as the result of their constant and thorough work as students, are now occupying positions of influence, responsibility and honor as practitioners. The tree is known by its fruit, and the power of a magnet is ascertained by a measure of its attractive force. So with colleges the class of work they do is known by the class of men they turn out. As our list of graduates increases the number of students increases, and to-day we have the largest number of students that we have had since the Faculty had an existence. The Medical Faculty of Bishop's College, though comparatively young, has not attained the high position which it now occupies without many struggles, pushing onward many times when the future seemed dark and unpromising. The loss of our late Dean, Dr. David, and of Dr. Kollmyer, our late professor of Materia Medica and Therapeutics, was sorely felt, and the illness of Dr. Kennedy, our professor of Obstetrics, which has unfitted him for further teaching this session, has also been a great drawback. But, on the other hand, we have a bright side to look at. There is an old saying that "there would be no progress unless the pupil excelled the teacher." Now the truth contained in that saying is applicable to schools. Old schools, like some old men, are loth to leave the beaten track. New schools, with new men and new methods of teaching, are required to strike out and find new paths, and the best proof that our more practical methods of teaching are the best is the fact that the older schools, seeing the result of our work, adopt our methods for their own advancement. The Medical Schools of the Province of Quebec this year enjoy facilities for the teaching of practical anatomy without being compelled to offend the finer feelings of the more respectable portions of the community. May this long continue! Though we are made aware by the daily press of the fact that there are yet a few Pharoahs who would take away our straw and yet demand of us first-class bricks. They would have us provide navigators capable of conducting safely across the broad ocean a vessel propelled by machinery which we are not allowed to explain and demonstrate. They would have us provide physicians, competent to treat successfully the most severe and grave injuries of that most intricate of all mechanisms, the human body, but they would not allow us legally to teach practically the different parts of that mechanism and their relations to each other. The great centres in the Old World are filled with able and enthusiastic workers in the science of healing, and they are constantly keeping us informed of the results of their labors through the medium of the Medical Press. During your college course your teachers give you this information. Seek to so ground yourselves in the principles of medicine that when you graduate you may be able to intelligently read and think for yourselves and have confidence in your conclusions. Let us all strive, each by contributing his quota, to hasten onward this progress of medical knowledge. Again thanking you, gentlemen, for your kind remarks, I would only add that the Faculty most heartily wish you every great success and prosperity.

The CHAIRMAN then gave "The Sister Faculties," which was responded to by Mr. P. S. Mesney on behalf of the Faculty of Arts, and Mr. John Leonard on behalf of the Faculty of Law.

The CHAIRMAN, in proposing "Our Sister Universities," referred to the friendly feeling which existed between the various Universities of the Dominion, and especially to the cordial feeling between the medical students of the various schools in Montreal.

Mr. W. PORTEOUS, a fourth-year medical student of McGill, responded on behalf of that University.

Mr. OSCAR COURTOIS, of Victoria College, responded eloquently in French, and Mr. Thos. Brennan in English on behalf of Laval University

Dr. TRENHOLME proposed "Our Guests" in a happy speech.

Dr. HENRY HOWARD responded. He said that it was hardly to be expected that a man who had practised his profession for 47 years, 23 of which had been spent among the insane, was able to address an audience of sane people. (Laughter and applause.) To him, who had spent so much of his time, as he had already stated, among the insane, it appeared that crime and insanity were closely allied, and that it was hard to draw the line between them, for they must remember that

there could be no effect without a cause. He gave a word of advice to the young men who were just entering their profession, and said that if they did not learn from nature in addition to what they learned from books, they would never be successful, but if, on the other hand, they studied the laws of nature thoroughly, this would, together with their college training, enable them to succeed. (Applause.)

Mr. A. D. NELSON and Mr. ALEX. MILLOY also briefly responded.

Mr. C. D. BALL proposed "The City Hospitals."

Dr. OSLER, who, on rising to respond, was received with applause, referred to the importance of the clinical instruction which the medical students received in our hospitals. Last year 2,200 patients were treated in the Montreal General Hospital alone, which was a much larger number in proportion to its size than in most other institutions. The house surgeon at the Massachusetts General Hospital at Boston recently informed him that about 2,400 patients had been treated in that hospital in one year, which was a much smaller proportion than in our institution, when it was considered that in the Boston institution they made up probably 250 beds each night. The success of the medical profession depended largely on the character of the hospitals within the reach of its students. Mr. Andrew Robertson, the President of the General Hospital, had said they hoped to proceed with the new wing shortly. (Applause.) The present building was not fully up to modern requirements, and he hoped that the citizens of Montreal would, before another five years, see that the city of Montreal, which was not only the commercial but the medical metropolis of Canada, was provided with a suitable institution. (Loud applause.)

Dr. GUERIN also responded on behalf of the Hotel Dieu, referring to the illustrious history of that institution, which was not only the pioneer institution, but the largest medical centre of the Dominion. (Applause.) The Hotel Dieu was cosmopolitan; it took in all, irrespective of nationality or creed, the only qualification required being illness. He concluded by singing the well-known college song, "Alma Mater," all joining in the chorus.

Mr. BALL then proposed "Our Graduates," which was responded to by Dr. Young, and Dr. Bell (Ottawa), the latter gentleman warning the young men against the evils of the intoxicating cup.

Mr. BALL then gave "Our Freshmen."

Mr. E. A. PHEALAN, responded. He said:—It gives me great pleasure to meet with you this evening for the first time and to have the honor of responding to such an important toast. You will no doubt be pleased to hear that the Freshmen class of '83 is the *largest* and the ladies say the *handsomest class* that has ever entered the College. We have been but a short time initiated into the science and mysteries of medicine, and, as we expected, we meet with a great many jaw-breaking, technical, names that to us are almost incomprehensible. Then there are the horrors of the dissecting room, which are enough to make strong men shrink from it with fear and deprive timid men of their senses; and it is no wonder that organ-grinders and rag-pickers do not stop as they pass by. (Applause). As Freshmen we have a very happy time, and are not bothered, like our seniors, with examinations, yet the first year is not the most desirable one of the four spent in college; for although we may study ever so hard and look as wise as the Clinical Professor at the Hospital, we are constantly reminded of the fact by our seniors that we are only Freshmen (Applause) But, gentlemen, even our wise and distinguished Professors were Freshmen once themselves, and had to take backseats, as we have to do, when the seniors are around. (Applause). And although we are *fresh* to-day, we live in hope that at some future period we will know *nearly* as much as our dignified and all-knowing seniors. (Applause) Now, gentlemen, if you are in want of medical advice do not endanger your precious lives by placing them in their hands; but wait patiently until the Freshmen class of '83 has graduated and *give us a chance to bleed you*. (Applause.) If I am not infringing too much on your valuable time I will give you a synopsis of some of the first lectures we attended, in order to give you some idea of the many trials we have to endure. Our worthy Professor of Materia Medica began with opium, saying that it was the inspissated juice obtained from the unripe capsule of "*Papaver Somniferum*," native of Asia Minor, cultivated in Briton, and eaten by the Chinese. In this way he continued, and before we had recovered our senses, he had gone through *Atropia Belladonna*, *Cannabus Indicus*, *Cinchona*, *Calisaya*, and St. Jacob's Oil (Loud Applause). Next came

Physiology, and our esteemed Professor, who has a very *strong arm*, began to tell us about Cartilage Epithelium, Protoplasm, &c., and tried to impress upon our minds the fact "*That man is made up of cells.*" This no doubt was a gentle hint that some of us will get *badly sold* when we come up for our examination before him next year. The next lecture was Chemistry, and although our worthy Professor is *Young* he is by far too *old* for us with his acid radicals and chemical equations. Last, but not least, came *Anatomy*. Here the poor Freshmen who had survived from the other lectures were taken by storm. The Professor pulled a *skeleton* out of a closet, and, without giving us a moment's warning, began naming the bones and muscles in this manner: Cranium, Os. Innominatum, Levator Anguli Oris, Rectus Capitis Anticus Major, Orbicularis Palpebrarum and Levator Labii Superioris Alequœ Nasi. (Applause.) Here the Professor paused for want of breath, and the Freshmen who were now *completely unconscious* were carried out of the class-room on a *stretcher*, which I have been informed is kept for that purpose. (Applause.) Fortunately they soon recovered, but it took some time to get accustomed to such terrible names. We have not been troubled with Botany yet, but our worthy Professor of Therapeutics will soon be *Reddy* to receive us—not with champagne, gentlemen, but with Diaphoretics and Antispasmodics. Thus you see, gentlemen, the many trying ordeals we have to pass through, and you should no longer wonder at the number of bald-headed doctors in this world, although some of them are unmarried. However, we are not discouraged with the commencement, but want to see more of it; and we look eagerly forward, as Moses did for the promised land, to the time when we shall be rewarded at the end of our course with the well-merited degree of C.M., M.D. (Prolonged Applause.)

Dr. Trenholme proposed the toast of the Graduating class of 1884.

Mr. R. C. Blackmer responded. He said:—In rising to respond to this toast which you have so heartily drank, my mind goes back over those four long years since first we began the study of medicine. Perhaps during all that time the thought of that great object for which we were working has never once been out of our minds. Day after day have we wandered listlessly through the wards of the Hospital, scribbled at our notes and toiled at our books, and night after night have we slept only to dream of dissections we could never get out, of formulæ we could never comprehend, and long panoramas of experiments that proved to us nothing. How often in our study of Saemiology have we recognized the signs of incipient disease stealing upon ourselves. How often have we heard our own lungs crepitate. How often have we felt the valves of our own hearts giving way piece by piece, and the deadly oppression of syncope creeping upon us. How often has the wolf of dyspepsia gnawed at our stomach until, in our imagination, it became a malignant cancer eating out our lives. And, too, there is such an uncertainty about incipient disease. We know how often it winds the unsuspecting patient in its toils, and rushes him on to that fatal stage beyond which all possibility of a cure is past before the patient is aware. Only those who have been medical students can tell the dread, the anxiety, the heartache, the fear that, as the last end draws near, he may possibly have overlooked some point in his studies that may involve his rejection at the Examination-day. Yes, the life of a medical student is not all anniversary dinners. Alas! too few of those oases appear in this long dreary desert of study. And yet there is a sort of fascination about the work. This study into the nature of life, those mysteries of growth and decay, this variety of function, this adaptability of structure; then comes in the question and desire for well-doing, the nobility of our profession, the relief of pain, the gifts of strength to the feeble, of health to the perishing. Then comes in that desire to avoid poverty and the search after that position in society which the members of our profession have always held. Although the doctor may never be rich, except in the hearts of those he benefits, yet the workman is always worthy of his hire. The thought, I say, of all these objects have kept us working on and on, when, without these to stimulate our ambition, we should have stopped very near where we began. For the class of '84 these four long years of study are drawing to a close, and that long lifetime of combined study and practice is just at its dawning. We already feel its freedom, and we also sense the overshadowing of those responsibilities it is sure to bring. Yet we have some confidence in our abilities. We know our education was not made in a day. It did not grow up in a night to wither again in the morning. It is the

products of slow growth and development. We may trace it stage by stage, from the time when, letter by letter, we learned the alphabet at our mother's knee. Then followed long weary months of multiplication table and up to higher mathematics. Then burst upon our minds Language with all the beauty of its romance, all the experience of its Histories, all the emulation of its Biography. Then came Science with its Natural History, its Astronomy and Philosophy. Then that nobler science of the mind, Ethics and Logic. 'Twas here perhaps that a great era occurred in the course of our education. 'Twas here we first learned to reason correctly. 'Twas here we first perceived the boundary line between faith and opinion, between dogmatical assertion and mathematical and logical demonstrations. Now many subjects on which we had expended what seemed useless labor burst upon our new intelligence with the full force of their usefulness and worth. It was at this time perhaps more than at all others that there became established that craving for learning. It was from this point more than from any other that we began to study for the love of knowledge itself more than for any lower motive. At about this time we began our medical studies; hard and dry at first they seemed, but from thence for four years have we labored incessantly upon them and made progress. We all believe that our profession holds the freest and most enlightened minds of to-day. With all due regard for the advancement which the art of medicine has already gained, with due respect for all those who have worked in the past and worked well to bring about these advancements,—we yet look on into the future for yet greater attainments than we have yet been able to realize. All other professions, generous, noble and necessary as they may be, draw their life-spring from the past; on its old burnt altars they fan the dying flame of a lost art. For us our life work and life hope is in the future. 'Tis there we look forward to the time when all art shall be science, all chance direction, all the discords of our profession made harmony, all empiricism swept away, and in its place substituted the results of Rational System. If the class of '84 are permitted to be among the humble agents to effect these changes we shall be abundantly satisfied. I thank you again for the spirit in which you have drank our health, and hope the ties of friendship which now bind us may always grow stronger and never weaker, and that you will ever support us with your aid and sympathy; and as we go out into the world may our fare be never worse than this spread before us to-night.

The toast of the "Ladies" was next given, and was responded to by Mr. Charles R. Devlin, who said: In returning thanks on behalf of the ladies, and in expressing my gratitude for the charming enthusiasm with which you have hailed this important toast, I cannot conceal feelings of indisputable embarrassment. It is quite unnecessary for me to acknowledge my inability to do this toast that justice which my heart and the hearts of my fellow-students would desire,—that marvelous justice for instance some of my surrounding gastronomic freshmen friends have done this sumptuous banquet. Indeed, it has been my fortune or misfortune—according to the view you may take of the case—to have been honored with the giving or answering of this same toast on innumerable occasions. Yes, and with pride do I declare it. I have not unfrequently vindicated, when assailed, the cause of the fairer sex: in the face of the world, in the full sense of the term, have I proclaimed them angels. Yet, strange to say, very humiliating at least to me, I have not become more angelic in their eyes; they have not learned to appreciate my efforts; there is not even a mortgage on the affections of my heart as I now stand in the market. My duty, however, is quite clear: I must continue to study, admire and adore them; I must continue hopeful in the market. Bear with me patiently, and with as much compassion as reasonable charity will tolerate, while I humbly chant a new canticle of praise in their honor: still circumspect and cautious in the extreme must be my notes, conscious that I am in the presence of husbands—husbands, gentlemen who may entertain peculiar notions about woman's worth and women's rights. Ah! were my audience solely composed of ardent admirers, of æsthetic lovers, what a grand opportunity mine would be to exclaim in triumph: "she is, always was, ever will be, man's guiding angel!" or even to assure the doubtful and throw the sterner sex into a delicious state of intoxication by reiterating the avenging cry of an immortal female: "I never will desert Wilkins Micawber!!" But I must not. There are some men—the question is, are they men?—whose fatality it is to never understand the intrinsic value of woman. True, they were once upon a time, a very long time ago, model admirers; their infatuated eyes (treacherous orbs!) could feast on no other object than their fair one;

for her sake how many feats of wonderful alacrity did they not perform! how many difficult and ridiculous situations did they not accept with evident satisfaction and delight. Once, however, the binding knot tied, where are their eyes, when in the presence of the fair one?—On the newspapers. Where their hearts?—In the clubs. To whom do they now pay their respects and devotion?—To every other man's wife, never to their own. I contend, gentlemen, that the dissecting room is the proper refuge for creatures so lost; et their couch be the dissecting table, and their attendants our industrious and immaculate freshmen. The Press is a potent factor in fanning the embers of domestic discord and trouble. Now, should there be reporters in this room, I pray them favor me with their best attention. How often do we read in the papers that the medical students have been guilty of this and of that! Their simplest offense is magnified into what these charming scribes very generously designate *scandalous behaviour;* our innocent little amusements are depicted in the darkest and most revolting colors; poor uncomplaining martyrs, we are often held up to public scorn, public denunciation or public malediction! Why are we the victims of this unwarrantable persecution? Why? Because we happen to be the unflinching and generally successful friends of the fair descendants of Mother Eve! Now look at the doings of these fortresses of society, those guardians of the peace, in short, those reporters. A man cannot call his wife green fruit, because she never agrees with him, without the same appearing the following morning in the papers. Just imagine, if you can, for I cannot describe, the feelings of this frail and delicate female. The papers tell you it is a kind of curious a certain nice-looking girl never goes to the telephone to answer a ring without wondering if her hair is all right and her train in proper shape. What right have the reporters to publish such matters? Why not confine themselves to events more in keeping with their intellect, to facts for instance relative to Cetewayo. Jumbo or the Franco-Chinese war? Unfortunately, they will not. Is there a place sufficiently warm for these factors of mischief, these tormentors of the fair sex, these persecutors of good and peaceable medical students? If ever the duty of the Inspector of Anatomy was clear, it is in the present case: subjects of the Fourth Estate should be elevated to the Dissecting Room.

Bear in mind, gentlemen, that, though an humble medical student, I am an advocate of Women's Rights. The medical student, thanks to the tenderness of his feelings, the sweetness of his disposition, to his innocent ways, to his gaining, suave and fascinating manners, is peculiarly fitted for this lofty position. He can, with energy and certainty of ultimate success, promulgate this noble advocacy. Not so with the barren law-student, whose dreams are a mixture of Pothier and the Civil Code, whose repast consists of factums and affidavits, whose only ambition is to learn how to swell a bill of costs. We are the earnest and faithful friends of woman; and, with a view of more effectively assuring the ladies of our entire sympathy, let us here assert our pride in witnessing their achievements. Yes! We are proud to see them becoming doctors, lawyers and masculine citizens, and we only hope the glorious day may soon dawn when we shall see MacDonald and Blake forever banished from our Parliament, and our female members standing up in the House of Commons to address: "Mrs. Speaker." Then shall our political atmosphere be thoroughly disinfected and sweet woman will rule the land and waves! Then shall the heroes of Austerlitz, Waterloo and Tel-el-kebir sink into comparative insignificance before the glorious defenders and victorious champions of Women's Rights! Gentlemen, it would never do for me to resume my seat without referring in another and different strain to this subject which is, after all, the toast of the daughter, the wife and the mother. Woman's influence is felt in every sphere of life. Is she the wife? Then she is the very soul of the house and, according to her qualities of mind and heart, the brightest ornament of society. More than this: her charity knows no bounds; her self-sacrificing spirit is ever ready for work whenever the cause of humanity or christianity demands it to exert itself.—where man would be a complete failure, woman is an entire success. Indeed I know a politician who candidly admits that the great N. P. which secured his election was his accomplished and winning wife: nobody could refuse her a vote, and when she kissed the children the effect was even more electrical than when he slipped the almighty dollar into the honest voter's hand. At all events she is the best friend of man, whether exalted or humble his position, whether vast or limited his resources. How frequently

after a brilliant career does he find himself ruined, deserted, friendless, and the false spirit of the world turned against him! Who, then, is his friend? Whose the soothing hand that helps and comforts? Whose the kind, loving word that cheers? Ah! it is in such circumstances that the wife's noble heart asserts its astounding devotion and prodigious courage. Is she the daughter—the sister? Then if, instead of the frivolous, vain, haughty creature, be it said with sorrow, we meet at times, she is the accomplished, graceful, and kind girl we invariably find in Montreal, she is the light of the family, the life of the home which, without her sweet voice, smile and presence, loses much of its charms. Show me the unfeeling student who is not swayed by the influence of this graceful being; she is as much the object of his ambition as is the profession to which he is consecrating his very best energy and talents. Who is proof against her charms—those charms that enliven us, lend grace to every circle, and spread happiness and joy wherever she moves? Than even these, gentlemen, there is one dearer to us, one whose sublimity is of a more striking order—our mother. What grander state, what nobler calling than that of Mother! what a spell she exercises over all, since the mother's appeal was sufficient to subdue the proudest conquerors, since it arrested the powerful Coriolanus and saved Rome from sure destruction. The mother, as it often happens in this heartless century, faces dangers and trials untold, overcomes obstacles that would defy a stouter arm, nurses her own sorrows—she, the mother of patience, the mother of meekness, the mother of sweetness—our own mother! Oh, gentlemen, this is a grand, an essential toast, this one to the Daughter, the Wife, the Mother. Look not to strange lands for beauty; unnecessary to study the annals of Greece, Rome and Carthage for examples of heroism and virtue. Were the truth always known, were it always proclaimed, here in the very heart of this great city, here in the humble abodes of the poor and lonely, here in the palatial mansions of the rich, will you find such models of beauty, such examples of heroism and supernatural virtue. With unbounded enthusiasm, then, should we ever honor this toast and proudly exclaim: All praise to the beautiful! God bless the good and noble-hearted daughters of our flourishing country.

"Absent Friends" was responded to by Mr. C. E. Parent.

The last toast, "Our next merry meeting," was responded to by Mr. A. P. Scott, when the singing of "Auld Lang Syne" and the "National Anthem" brought a most enjoyable evening to a close, shortly after one o'clock.

McGILL UNIVERSITY.

ANNUAL DINNER OF THE UNDER-GRADUATES.

The second annual dinner of the under graduates of McGill University was held in the ladies' ordinary of the Windsor Hotel on the 7th of December, about one hundred and fifty sitting down. The tables presented a pretty sight, being beautifully decorated, and about the room were hung a number of appropriate mottos. Mr. R. F. Ruttan, B.A., presided, and was supported on either side by a number of prominent gentlemen, among them being Judges Mackay and Torrance, Thomas Workman and Andrew Robertson. A number of guests were present. Among them the members of the Medical Faculty of the University and Dr. F. W. Campbell, the Dean of the Medical Faculty of Bishop's College, also Mr. J. Spencer, representing the Toronto School of Medicine; Mr. Fierheller, representing Trinity Medical School, Toronto; Mr. Cumberland, the Kingston Medical School; Mr. Valin, Laval Medical School; and Mr. Blackmer, Bishop's College Medical School.

After the appetizing bill of fare had been gone through with, the Chairman made a few well-chosen remarks, extending, on behalf of the undergraduates a hearty welcome to their *confrères* from Toronto and Kingston. He contended that the social aspect of a college life was a feature that did not receive sufficient attention.

The Secretary, Mr. L. D. Ross, read a list of regrets from persons who had been invited, but who were unable to attend, among whom were the Governor-General, the Lieutenant-Governor of Quebec, Mayor Beaudry, and many other eminent persons.

After the usual loyal toasts, the Chairman proposed "Our University, its Governors, Graduates and Professors."

On behalf of the Governors, Hon. Justice Mackay responded, and in the course of his remarks said that he considered the medical profession equal, if not superior, to nearly all professions, and

that its social status was fully equal to that of any other. He was proud to state that McGill University was attaining some celebrity, and its medical school had always greatly contributed to its fame. (Applause).

In responding for the undergraduates, Dr. Grant of Ottawa, alluded to the present assembly as forming a union to be remembered for a lifetime. The McGill graduates were proud of their *Alma Mater* and of the great work it was accomplishing throughout the Dominion. He considered that the medical college was to this country what the school of Hippocrates was to ancient Greece.

Dr. HOWARD proposed the sentiment, "Our Benefactors." He referred to the fact that the past year had been marked by two important events, the 50th anniversary of the McGill College Medical Faculty and the death of its honored head, Dr. G. W. Campbell. In view of these notable events, the Faculty had deemed it advisable to make an appeal to the citizens of Montreal so as to secure an endowment of the Faculty and to provide a fitting memorial to their late lamented Dean. He then referred to the generous donation of $50,000 by the Hon. Donald A. Smith, and to that of Mr. George Stephen of $50,000 towards a Campbell memorial wing to the General Hospital. The members of the Faculty set to work, and, in a few months, raised the prescribed sum, which entitled them to the donation. In conclusion, he said that he would thank such generous benefactors on behalf of the undergraduates themselves, as these handsome donations would contribute materially to their progress. Amid loud cheers this toast was honored, all present joining in singing, " For they are jolly good fellows."

Mr. THOMAS Workman responded, and stated that he was confident that their endowment fund would yet amount to one million dollars. He urged the students to follow in the path of integrity and uprightness as the key to success.

The toast of the " Montreal General Hospital " was proposed by Mr. G. F. Palmer, and responded to by Mr. Andrew Robertson.

Our sister Universities was proposed by Mr. J. M. Elder, and responded to by Mr. J. Spencer, of the Toronto School of Medicine, who spoke of the kind treatment which he was receiving. He referred to some changes that he considered would be advantageous in the courses of the majority of medical schools, instancing particularly the elevation of the standard of matriculation, so as to include chemistry, zoology and botany, and a more practical clinical instruction in the final year.

Mr. Fierheller, of Trinity Medical School ; Mr. Cumberland, of the Kingston Medical School ; Mr. Blackmer of Bishop's College ; and Mr. Valin, the representative from Laval, also responded to this toast.

The health of Principal Dawson, the Class of '84, the Freshmen, the Ladies, and the Chairman was afterwards drunk, and a vote of thanks was tendered to the Committee of Arrangements for its very efficient labors. During the evening a number of songs and choruses were rendered by the students.

Progress of Science.

PÆDIATRIC THERAPEUTICS AND ITS RELATION TO GENERAL THERAPEUTICS.

In a lecture delivered recently to the class at Bellevue Hospital Medical College by Prof. A. A. Smith, on the frequent repetition of doses of medicine, he clearly opens up a field of investigation which, to my mind, is one of the greatest importance.

One of the very important questions of the day now is, do we seek for the *physiological* effect of medicines, or do we derive their full poisonous or *drug* effect when we administer them to our patient?

If the former (and to my mind that is what we usually seek for), then certainly that can be better obtained and maintained by the small and frequently repeated doses, and thus, too, we can the better avoid the deleterious and often dangerous effects of the latter. The doctor in his lecture gives us his experience coupled with the experience of some others in the small and frequently repeated doses of chlorate of potash, croton chloral, bicarbonate of soda, balsam of copaiba, atropia, the bromides, chamomilia, tartar-emetic, nux vomica, cantharides, pulsatilla, calabar bean, ergot, aconite hamamelis and belladonna. The experience he narrates to the class is certainly pregnant with important facts and suggestions. I perhaps would have paid less attention to it if I had not had the same experience in the use of some of the medicines mentioned, and knowing by experience that in them the doctor was correct, I was the more encouraged to test some of the others also, which I find stand the test. If not regarded as presumptuous, I would like to add my feeble testimony in support of the doctor's statement, as well as a little additional of my own experience and observation in the use of aconite, belladonna, nux

and ipecac, and also bring into the same category lobelia, asclepias, baptisia, santonine, hyposulphite of soda and veratrum viride. And this I will endeavor to do briefly, not stopping to give a theory or reason why; but content myself with the statements that any one can verify for themselves and then form their own theories, and in this I will endeavor to confine my remarks to the treatment of children especially.

I have fully verified the happy results of Dr. Smith in his experience in giving one-third (⅓) to one-half (½) minim of tincture aconite every 15 to 30 minutes to his adult patients in fever. I have often found that in children suffering with fever, hot skin and dry throat, restless, with feeble, frequent and thready pulse, the best prescription I can give my little patient is 3 to 5 minims of tincture rad. aconite put into four (4) ounces of water, and to a patient of 2 years old give of this mixture one teaspoonful every 15 minutes. Under this treatment my patient will soon begin to rest, the pulse becomes less frequent, soft and of better tone, perspiration will soon be manifest, the temperature will come down, more secretion of the mouth and throat is established, croupal symptoms will subside, tonsilitis, pharyngitis and bronchitis, if present, will be ameliorated. Aconite is capable and has produced such excellent results in the treatment of children that some are desirous of calling it the children's medicine, but experience proves that where it is appropriately used in proper doses, its effects are just as desirable when given to the adult. If an inflammation is actually attacking our little patient, and is manifested by a full, bounding pulse, this can be the better controlled by the use of 2 or 3 drops of Norwood's tincture of veratrum viride either as a substitute for or in connection with the aconite in four ounces of water given similarly. If diarrhœa with fever exists, the use of the 3 drops of aconite with 3 to 6 drops of tincture ipecac in 4 ounces of water is given in teaspoonful doses every 30 minutes, the results will be very desirable and even surprising to those not accustomed to its use. The same is true in proportionate doses when used in the adult.

It controls nausea and vomiting when thus given in small doses.

Belladonna in small doses, as the professor suggests, gives us excellent results, especially with children, and is also capable of extensive application. If given in small doses will give surprising results (perhaps, as a capillary contractor) in case of local congestion. In pulmonary congestion, when combined with aconite or veratrum, if specially indicated by the full, bounding pulse, I have no doubt, if used in time, by far the majority of pneumonias and local inflammations can be aborted. If our little patient is dull and drowsy, face restless or expressionless, circulation feeble in the skin, as indicated by a livid color, the capillaries slowly filling after being emptied by pressure; or in the brain, as indicated by a dilated or immobile pupil; or in the bladder, as indicated by the passage of large quantities of limpid urine, or incontinence and involuntary discharge of urine—nothing have I ever found so reliable in moving these abnormal symptoms, with their causes, as small doses of belladonna frequently repeated. Dose for children two years old, for example, about one-eighth to one-fourth minim, repeated every one or two hours, as symptoms require; excellent also in the debilitating night sweats of the adult in proportionate doses. Doubtless the experiment of Brown-Sequard first led the profession to the use of belladonna in all congestions producing dilatation of the capillaries of blood-vessels, as they thus proved its special influence was to contract the capillaries.

In this respect it is the opposite of gelseminum, whose special province seems to be to control irritation; thus to stop or lessen the determination of blood to a part, and thus preventing the congestion by removing the cause; but where the congestion is fully established, a partial paralysis, and thus dilation of the capillaries is produced, then belladonna becomes the appropriate remedy.

In eruptive fevers its influence is to bring the eruption to the surface by overcoming internal congestion, and thus equalizing the circulation by determining to the skin. I believe when we better understand the nature and influence of the deadly night-shade, its belladonna and atropine will occupy a still more important place in our materia medica, and especially in the prescription of the coming physician.

NUX VOMICA.

Some one has said that nux vomica is the tonic of children.

It is received kindly by the stomach, improves the appetite and digestion, as well as tones up the debilitated nervous system.

It thus proves itself to be the remedy in nausea and vomiting, as well as infantile colic and irritation of the brain and spinal cord when due to enfeeblement.

One or two drops of the tincture in four ounces of water, or five to fifteen to the adult, one teaspoonful given every twenty minutes will give us excellent satisfaction if our case is properly diagnosed. We like its effects in diarrhœa of children, where the abdomen is full and flaccid, and especially where the pain is similar to colic and located at the umbilicus. In cholera infantum it is one of the important remedies if there is atony of the bowels, with enfeebled intervation and circulation.

IPECAC.

Why does the medicine whose special province heretofore has been to produce nausea and vomiting now prove itself so efficient (as the professor reports) in obstinate cases of vomiting and diarrhœa, when given in small doses frequently repeated? In my mind the question arises, is not the kind physiological effect of ipecac always to relieve irritation of the mucous membranes, and its drug or poisonous effect the opposite?

To satisfy the skeptical mind, let the intelligent practitioner try it in cases of irritation of the stomach, bowels, or bronchial tubes, in small dose, such as tinct. ipecac two to ten drops, according to the age of the child, in four ounces of water, and given one teaspoonful every fifteen to fifty minutes, and in adults in proportion, and when he obtains the certain relief from obstinate nausea, vomiting and diarrhœa, which he certainly will when due to irritation; diarrhœa of the simplest form to the severe cases of cholera infantum or dysentery, and when accompanied with fever, combined with similar doses of aconite; then let him answer in his own mind whether he is better pleased with the physiological or drug effect of the remedy. In this respect ipecac seems to be the converse of nux vomica, which proves so efficient in the same disease, when due to enfeeblement or atony instead of over-excitement or irritation.

LOBELIA.

Let us hastily glance at this, another of the nauseant and emetic medicines, when given in full doses. Like its relative, ipecacuanha, its physiological is different from its drug effect. Given in cases of difficult or oppressed breathing, suffusion of the face, congestion, and especially in mucous rattling of the bronchial tubes, small doses of lobelia will improve innervation, give energy to the oppressed organs, and enable them to throw off the congestion and over-supply of mucous secretion; while in a little larger doses short of its emetic effect, it is an excellent antispasmodic in croup, asthma, and, in the hands of the obstetrician, proves a kind and valuable remedy in overcoming the rigidity of the *undilatable os uteri*, when given in one-drop doses, repeated every fifteen to twenty minutes.

BRYONIA AND ASCLEPIAS.

These two medicines, whose special province seems to be to allay irritation of serous membranes, sometimes surprise us with their kindly and positive influence.

Well do I remember, some years ago, of attending on a Mr. F., æt. 40 years, German descent, usually healthy, strong and robust, but then suffering with severe pleuro-pneumonia, and most intensely with the pleuritic stitch, which was so interfering with respiration as to be alarming at times; and after prescribing the usual sedatives, aconite and veratrum for fever, with full doses of Dover's powder and morphia to control the pain, and feeling confident of early relief, I repaired to the country. But some hours after my visit, instead of the expected relief, the pains in the chest became more severe and the interference with respiration more alarming, and another physician, my friend T. G. Matheny, was called to administer to him until my return. His prescription was tinct. bryonia and tinct. asclepias a a gtt., xx.; water, ℥ iv. M. Sig.: One teaspoonful every thirty minutes until pains were relieved, and every hour thereafter.

On my return and learning the above facts, and having confidence in the intelligence of the physician, and seeing the relief approaching, I continued the above prescription, not resuming the opiates, which had been set aside. Next morning I found my patient almost entirely free from pain, and fever very much abated, perspiration well established, and my patient very cheerful.

During the week following, the pains would occasionally return, but would again subside under the influence of the bryonia and asclepias. This repeated experience strengthened my resolution to study to know more of these remedies, and to more fully test them in other cases, which I did, usually with good satisfaction. After careful study and experiment, I find, as I believe, the physiological effects of bryonia to be sedative to serous membranes especially, and thus a remedy in irritation of such membranes, whether of the chest as in pleuritis, or in the joints as in articular rheumatism, or abdomen as in peritonitis, and more especially if the pains are lancinating and accompanied by a tension of the muscles of the affected part, and excessive tenderness on pressure or motion of the parts, accompanied with restlessness, high fever, hot skin, and hard corded pulse; asclepias, as a type of diaphoretics, certainly quiets the nervous system, brings down the temperature, induces perspiration, relieves pain in serous membranes, and is thus a valuable remedy in such inflammations, and especially when accompanied with a hot, dry skin.

BAPTISIA.

Although I have used this remedy for many years in my treatment of children in septic fevers, believing it to be antiseptic and thus antifebrile, I confess, however, to many disappointments in its use, and a very imperfect knowledge of its real nature, and although we think we know more about it now than we did in former years, yet we know but very little, compared to what we believe is to be known of its therapeutic properties. I remember reading an article written by Prof. Scudder, of Cincinnatti, in which he regarded it as an antizymotic, and its antiseptic and antifebrile properties depending on its power to antidote a peculiar ferment or poison in the blood causing the attendant fever, and this having peculiar manifestation, different from any other poison, producing a peculiar dusky color of the face, like one who had been exposed to severe cold. He recommended it in cases where the sepsis produces a deep red or violet color of the mucous membrane, with brown or black shade or tinge, and especially where there is foul breath, with a tendency to ulceration; and since using it in that class of cases, and in ulcerative sore mouth and throat, especially where there is any putrescence, both locally and internally, I am the better pleased with its effects.

Dose to child:

℞ Tinct. baptisia.....gtt. v to xx
Aqua dist..... ℥ iv.
M S. One teaspoonful every one or two hours.

SANTONINE.

We usually think of santonine as a vermifuge only, in which it stands at the head of its class; but it has other important properties. I will not tarry now to discuss how or why it has a peculiar influence over the bladder, which renders it so efficient in overcoming, in some special cases, that severe burning or scalding sensation and tenesmus of the bladder, but only stop to say, in addition, that in some cases of retention of urine, a few small doses of santonine will prove to be the remedy *par exellence*.

HYPOSULPHITE OF SODA.

Last but not least, I wish to notice briefly hyposulphite of soda.

Standing as it does in the list of alkalies, and fulfilling their general indication, yet it seems to subserve a special purpose of its own. If we have acid fermentation in the stomach, indicated by acid eructations, coated tongue, or rather furred with a white or greyish-white or dirty color, accompanied, in children especially, with colic and green acrid discharges of the bowels, we naturally think of alkalies. If our patient is suffering with boils or abscesses of the cellular or muscular tissue, we say lime is the remedy, as it is the salt which preserves these tissues; or, if the coating of the tongue is a clean white, in the absence of any destruction of tissue, we use bicarbonate of soda, believing that through its influence on the blood it influences nutrition as well as antidotes the acid; but when we have the dirty gray or brown color, tongue pallid and broad, accompanied with foul breath and fever, then the antizymotic influence of hyposulphite of soda will correct all, and lead our patient out into the sunlight of health and happiness.

I have thus briefly dwelt upon some of these remedies, and referred to my own experience, with that of others, and thus challenge the attention of this Section for the purpose of showing, as practically as I possibly can, the true relation existing in the treatment of children and adults, believing that if we candidly consider the true relation, we will reasonably conclude the way to treat children is to consider them human beings—offspring of their parents, subject to like infirmities and diseases, and to be similarly treated with proportionate doses, and this will simplify the study for the earnest student and enhance the sufficiency and proficiency of the therapeutist.

It is in the interest of the children also that I ask the intelligent attention of all concerned, and especially the college teacher, to the similarity of medication in all ages, and that to be suggested by the existing symptoms—not allowing the name given to the disease or name or age of our patient to drift us from our moorings, but ever aim to overcome the existing symptoms by their appropriate remedies. We should also encourge careful observation on the physiological action of medicines, as being of equal, if not of paramount, importance to its toxic effects (for I believe the former is what we usually desire), and thus we will be the better enabled to apply our remedies more intelligently and directly to the relief of the existing symptoms.—*Journal of American Medical Association.*

ON THE TREATMENT OF PNEUMONIA.*

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GENTLEMEN,—I shall devote this lecture to the treatment of pneumonia. The history of the therapeutics of pulmonary diseases comprehends no subject of greater interest than this. Just as we have seen Huxley in England give a whole treatise of physiology while writing about the crayfish, so so in describing the various treatments of pneumonia which have at different times prevailed, and the discussions which have arisen therefrom, one would go over about the entire history of the treatment of disease in general. Permit me, then, as briefly as possible, to sum up the history of the therapeutics of pneumonia.

The suddenness and gravity of the invasion, the intensity of the febrile phenomena, the profound disturbance of the respiration, all conspire to render pneumonia one of the most serious diseases of the economy. Hence the ancients, not having for their guide auscultation and percussion, made of this affection the type of plegmasias. They directed against this disease, which they regarded as one of the most dangerous, a treatment proportional to the evil to be overcome, and drew from the arsenal of therapeutics the most energetic remedies. We must triumph over the disease, said Sydenham, and this pernicious doctrine has for a long time directed the entire therapeutics of pneumonia. It was forgotten that in this contest between the physician and the disease there exists a patient; more than all, the true Hippocratic doctrine was lost sight of, and the definition which Hippocrates gave to the disease. The father of medicine regarded the morbid phenomena as symptoms of the struggle by which nature was attempting to effect a removal of the disease; it was of importance, then, not to disturb (without very strong reasons) this spontaneous tendency of nature toward restoration.

During long years, then, treatments of the most heroic kind were instituted against pneumonia and what served to perpetuate the error was the fact that pneumonia was seen to disappear and the patients to get well under these treatments. Only the period of convalescence was long, and it was the custom to attribute this enfeeblement not to the medication, but rather to the pulmonary affection itself.

In the eighteenth century we observe several tentatives made in good earnest to establish a hygienic treatment of pneumonia, but these at-

*Translated, by permission of the author, from advanced sheets, by E. P. Hurd, M.D., Newburyport, Mass.

tempts on the part of Van Swieten and Boerhave were soon forgotten, and the profession came back, more determined than ever, to modes of treatment the most violent and heroic. But this entire scaffolding, for ages based on tradition, was destined to fall to the ground under the destructive influence of two methods of investigation which came to be applied to the study of diseases; statistics on the one part, and the observation of temperature on the other.

The doctrine of Broussais, which had pushed to its extreme limits the diabolical methods which it had engendered, aroused a vigorous reaction and this rection took for its guide Observation and Statistics. Andral, Louis, Chomel, and Valleix rallied around a banner which had for device, *Numerandœ et perpendendœ observationes.* Then the school of Vienna followed the school of Paris in its new departure, and Skoda and his pupil, Dielt, showed us all the advantages which one might derive from statistics in the study of the treatment of disease.

What did statistics show when applied to the examination of the different treatments of pneumonia? That the absence of all medication gave better results than medication of a very active kind. Here was a fact of prime importance which destroyed at one blow the therapeutic rule which had heretofore prevailed, namely, that it is necessary to treat a severe disease by severe remedies.

But statistics alone can never settle a disputed point in therapeutics. The statistical method of demonstration has certainly a high value, in the other sciences; it does not, however, in mdicine, and especially in therapeutics, give all the results which might be expected of it. Therefore, without going quite as far as Forget, who regards statistics (*la statistque*) as "an obliging maid who gives herself to the first comer," we may properly affirm that the medical products which are the offspring of his method of observation are incongruous and of little vitality.

In fact in medicine, and particularly therapeutics, observations are seldom or never proper subjects of comparison. Individual conditions and the type of the disease more especially, may at each instant modify the results, and this it is that explains the popularity and the decadence of therapeutic agents A remedy which at one time has wrought wonderful cures, at another time is employed with no success at all, and this difference results from the circumstance that in the one set of cases the disease appeared in mild form, while in the other cases it was grave. Would you have a proof of what I now advance? Cast your eye over the important statistics published by Lebœuf, *a propos* of the treatment of pneumonia, and you will there see that the mortality has varied from 0 to 40 per cent. according to the years, and this, although the same therapeutic methods were employed.

The application of the thermometer to the study of diseases was a weapon still more powerful against the doctrines of the past. Thanks to Boerensprung, Traube, Wunderlich, the use of the clinical thermometer has become a matter of routine in our private and hospital practice. This little instrument has taught us that a great number of diseases have a regular march, a definite cycle, whose periods of "augment," "fastigium," and "decline" may be observed.

For diseases with a definite cycle, abortive systems of treatment do not exist, and just as we cannot arrest typhoid or eruptive fevers in their march, so also we are unable to throttle pneumonia in its evolution; hence the first condition for a fair appreciation of the results of medication directed to a pathological state, is to know the normal cyclical evolution of the affection. As for pneumonia, you know its evolution; no subject at the present day is better understood. Simple pneumonia, also called lobar pneumonia, the croupous pneumonia of the Germans, is characterized, from an anatomical point of view, by a fibrinous exudation which occupies the interior of the pulmonary alveoli; this exudation, at the end of a certain time, undergoes a granulo fatty degeneration which permits its resorption and removal. These essential modifications, which characterize simple pneumonia, and which constitute by their *ensemble* what has been described under the name of hepatization, are accompanied by a train of febrile manifestations which comprehend the general symptoms of pneumonia, and in which we observed a sudden invasion, a stationary period, and, finally, a period of defervescence. What is of most importance for us to know from the point of observation which we occupy, is at what moment this defervescence takes place when the disease is left to itself. Jurgensen has furnished us in this particular some important statistics; he has, in fact, studied in seven hundred and twenty-one cases the epoch of this defervescence, and on consulting the tables which he has given, it appears that ordinarily the change takes place on the fifth or on the seventh day. Quite recently also our colleague, Dr. Fernet, reviewing the subject, has demonstrated the regular and cyclical march of simple acute pneumonia*.

* Fernet. De la Pneumonia Franche Aigue, de son Evolution, et de sa Crise. Arch. Gen. de Med., July and August, 1881, pages 5 and 155. According to this author the evolution of pneumonia is perfectly represented by the march of the fever, and figured by the thermometrical curve.

The invasion of the disease is marked by a slight chill. Then comes an intense fever, which persists without abatement for five to seven days (as the average), and then falls rapidly. Concurrently with this fever a local lesion is developed in the lung, a lesion which finds expression in a fibrinous exudation which solidifies (red hepatization), forming in the pulmonary parenchyma one or more compact blocks. This hepatization, which is the lesion of pneumonia at the period of "fastigium," lasts in general as long as the fever, and then undergoes transformations which permit the return of the organ to the normal state (breaking up and elimination of the exudation). This last phase of organic reparation belongs rather to the period of convalescence than to that of the malady in its active manifestations. By this evolution, and by this local lesion, pneumonia resembles the eruptive fevers.

It is worthy of note that defervescence may take place in a much shorter space of time, and pneumonias have been recognized which have completed their evolution in three or four days. Thus out of seven hundred and twenty-one cases in Jurgensen's tables, in thirty-seven defervesence took place at the end of three days, and in fifty at the end of four days, while in one hundred and twenty it came on at the end of five days, and in one hundred and sixty-five at the end of seven days.

Having once possessed yourself of the fact that simple fibrinous pneumonia, without being influenced by any treatment, has a defervescence which shows itself ordinarily toward the seventh day, let us examiue and pass judgment on the different remedial measures which have been proposed to combat this phlegmasia. I will group these remedial measures under three heads. First we will study those which accomplish their results by causing a profound perturbation of the economy, and a lowering of the vital forces, and of the temperature accompanying this perturbation. I call this spoliative medication. The second have for their effect to support the forces of the patient —tonic medication. The third are based upon the study of normal evolution of the malady—expectant methods of treatment.

The spoliative medication comprises blood-letting, antimonials, digitalis, veratrum, quinine, and refrigeration.

Venesection has long been the basis of the therapeutics of pneumonia. It has been the fashion, down to a very recent period, to bleed in this disease, and to bleed freely, and every physican who did not bleed his patent was derelict in duty. If there was any difference of opinion, it was not concerning the advisability of bleeding, but as to the quantity of vitat fluid which ought to be abstracted, and the best place for venesection. Ought we to bleed the veins of the same side? Ought we to open the vein transversely or longitudinally? Such questions were discussed. Sydenham used to take from ten to fifteen ounces of blood in the morning, and as much in the evening, and the next morning, taking in all between two and three pints of blood. Borsieri would take a quart a day; in Italy they would exceed two quarts; and Bouillaud, our illustrious master, following the tradition of Broussais, who used to bleed to syncope, formulated in 1837 the method of blood-letting, known as "coup sur coup" (blow and blow). He prescibed, the first day of treatment, two bleedings from the forearm of four cupfuls, and the application of numerous wet cups; the next day another bleeding and leechings or scarifications; the third day still another bleeding, which was renewed the fourth and the fifth day, if the pneumonia resisted. This word "resisted," is characteristic—it brings into view the idea of the struggle between the disease and the medication, which I spoke of at the beginning of this lecture, and which, at this epoch, directed the therapeutics of pneumonia.

In 1853 Valleix, in his Guide du Médecin Practicien, and Gresolle, in his Treatise on Pneumonia, spoke of bleeding as the first therapeutic measure, dominating all the others.

In judging of the action of blood-letting in pneumonia, we ought not to rely on statistics alone; we ought to study the composition of the blood in a patient affected with pneumonia, then ascertain what effect blood-letting can have on such a condition. Let us see first what are the results of bleeding on the symptoms of pneumonia. As far as the exudation is concerned, the action of bleeding is *nil*, it can neither prevent this exudation nor hasten its regression.

Is the action of bleeding more manifest on the local and general symptoms? Yes, it modifies both the temperature and the dyspnœa. In febrile states bleeding appears to me to be one of our most powerful anti-thermic remedies. Observe what happens in typhoid fever when a hæmorrhage of considerable intensity takes place, there is a rapid fall in the temperature, and it is the same in pneumonia, and sometimes this lowering of fever heat lasts.

This is what has just taken place in our hospital service, in the case of a young man of twenty-six years of age, who occupies No. 9 of the male wards. He has had pneumonia of the left upper lobe. His temperature on the fifth day of the sickness was 40.8° C.; he was bled to ten ounces, and his temperature fell gradually, and has not again risen.

At the same time that the temperature falls the dyspnœa abates, and this explains the persistence of our fathers in considering bleeding as the best treatment of pneumonia.

But the advantages, considerable as they may seem to be, which we have just noted in favor of bleeding, are more than offset by serious disadvantages. We know at the present day sufficiently well the state of the blood in pneumonic patients, thanks to the labors of Hanot, Grancher, Quinquaud, and especially to the researches of Professor Hayem.

Whether you employ the chemical tests of Quinquaud, or the process of enumeration of the globules, or the new methods of examination of the blood proposed by Hayem, this is what is observed in the blood of individuals affected with pneumonia. The fibrine presents quite a considerable reticulum, the red corpuscles are not diminished, and the hæmoglobine remains almost at the normal figure; but, as Grancher has well shown, the number of white globules augments, and this evolution follows the thermic curve.

The crisis appears about the sixth or seventh day, with sudden defervescence and abundant sweats.

The modifications of the urine, epistaxis, diarrhœa, naso-labial eruptions, are not critical phenomena, but are with the exception of the eruption) accidents or complicationst The naso-labial herpetic eruption appears regularly abou the third day of the disease, preceding, by a considerable interval, the crisis, and is regarded as another local manifestation of the disease.

If you bleed these patients, you diminish the mass of blood only for a moment, for the blood-vessels take up from the lymphatic vessels that surround them a quantity of fluid equal to that which you have abstracted. But if you have not diminished in a durable way the mass of blood you have certainly increased the number of white globules, and as these are already in excess in pneumonia, you have put your patient in conditions favorable for suppuration. You know, in fact, gentlemen, that there is, between the production of pus and the number of white globules existing at any given moment in the blood, a very intimate relation. This tendency to purulence may then occasion suppuration of the intra-alveolar exudation, and so produce a termination of the gravest kind.

To sum up, then, if bleeding may lower the temperature and diminish temporarily the dyspnœa of the patient, it enfeebles the latter, and puts him in a condition favorable for suppuration, without diminishing, in any degree whatever, the normal march of the exudation.

This is, in truth, what has taken place in the case of the patient (No. 9) of whom I have just spoken; by the bleeding we obtained a lowering of the temperature, but immediately delirium set in, and a general enfeeblement ensued, without the slightest evidence, by the ordinary physical signs, of any diminution of the pulmonary exudation.

Be it understood that by the word "blood-letting," I mean only venesection; I do not include cupping, which appears to be of considerable utility in relieving the pain of pneumonia, acting rather on the principle of revulsion than of spoliation.

By the side of venesection we should place another kind of treatment which has been, and in fact, is now, much in vogue; I allude to medication by antimonials, and especially tartar emetic. This medicament has been the subject of earnest discussions and angry partisanship. Denounced by Guy Paton, and forbidden by the Faculty, it was long kept under the ban; eventually it obtained a firm place in the materia medica, from which it has hardly yet been driven. It is to Rasori, an Italian physician, that the employment of tartar emetic is due. Rasori maintained that in every inflammatory disease we ought to combat the stimulus, therefore, he was in the habit of administering tartrate of antimony in large doses, giving from one-half gramme to one gramme in a quart of water, and repeating the dose during the day; he at first associated blood-letting with this medication, then relied on the latter alone. Many of his disciples have carried this treatment still further, giving as much as six grammes (ninety grains) daily of this medicament, so that the patient during his sickness would sometimes take as much as sixty grammes (about two ounces). At the present day much smaller doses are given. We do not ordinarily prescribe more than one-eighth of a grain, and may be given with syrup of poppies, which makes it better tolerated by the stomach.

Tolerance, in fact, is an essential part of this medication; most partisans of the antimonial treatment claim that the less the emetic and purgative effect, the more curative the medicament in pneumonia. Laennec, who was one of the most ardent promoters of this mode of treatment, and who even went so far as to regard tartar emetic as specific in pneumonia, has insisted on this tolerance. Sign of profound adynamia to some, this tolerance has been regarded by others as a favorable symptom, and a variety of ways have been recommended for obtaining it. Ancelon, of Dieuze, orders the limitation, and even the suppression of all liquid ingesta; Herard counsels to employ nothing but distilled water in making the antimonial solution; the greater number associate opium with the antimonial.

How does tartar emetic act in pneumonia? Let us examine, first, its physiological action, then its action in the disease. Physiologically it produces a profound local irritation. It develops pustules on all the points with which it comes in contact. Grisolle, in cases where tartrate of antimony has been given by mouth, has observed ulcerations throughout the whole extent of the alimentary canal; in the throat, œsophagus, stomach and intestine. These ulcerations have even caused strictures, from cicatricial contraction. This local action of the antimonial explains its emeto-cathartic action. It has even provoked such obstinate diarrhœa and vomiting that the symptoms have resembled those of cholera, hence the name "cholera stibii."

Binz has demonstrated its direct action on the heart; it diminishes the contractions of this organ and thereby enfeebles the circulation and causes a lowering of temperature; moreover, it depresses the nervous system, and, by the nausea which it provokes, gives rise to a condition resembling sea-sickness.

The antimonial treatment, then, like blood-letting is both depressant and refrigerant.

The action of tartar emetic on the pulmonary exudation is absolutely *nil;* it lowers the fever heat, but this result is obtained at the expense of grave perturbations of the economy; enduring lesions of the digestive tube are often produced, and the forces of the patient are unduly depressed. In large doses it is a dangerous medicine, and the remembrances which I have retained of results obtained by this method of treatment when I was just entering on my medical career have left an impression far from favorable; if it is dangerous in the case of adults, it is far more so when administered to children. I have, in fact, seen little pneumonic patients made far sicker by the medicine than they were by the disease.

I would then give tartar emetic in pneumonia only to produce an evacuant effect and to clear the lungs, through the efforts of vomiting, of the mucosities which encumber them. This emetic

action you may obtain also by other antimonial preparations,—kermes mineral and the white oxide of antimony. The latter preparation, which is a good expectorant, especially for children (recommended highly by Roger), may be given in the dose of a scruple or half a drachm in mucilage or sirup. The following calmativ potion may be taken during the day; it contain kermes:

℞ Hydrated sulphuret of antimony...0.50 (viiss gr.
Aqua lauro cerasi.....
Aqua tiliæ Europ.....
Aqua lactucarii.....
Syrup of poppies.....aa 30. (℥i) M.

By the side of these medicaments I would place ipecac, whose effects in the treatment of pneumonia have been much vaunted. The school of Montpellier has most earnestly advocated the use of this remedy in pneumonia. Broussonnet, Pecholier, Ressiguier, among others, have recommended it. Ipecac acts in two ways: it modifies the secretion of the bronchial glans and aids expectoration; on the other hand, it excites vomiting, and thus diminishes congestion of the lungs, and aids the expulsion of bronchial mucus. Perhaps, also, we should mention in this connection the slowing action of ipecac on the circulation, so well described by Pecholier, Dyce, Duckworth, and others. Ipecac is given in pneumonia in the dose of one gramme and a half to two grammes (twenty to thirty grains).

We come now to other medicaments which act on the circulation and the temperature—digitalis, quinine and veratrum.

The usage of digitalis in the treatment of inflammations originated with the Germans. Traube, in 1850, was one of the first to recommend it in plegmasias; it is the school of Strasbourg that deserves the credit of demonstrating all the benefit which we may obtain from this medicinal agent in the treatment of pneumonia. The labors of Hirtz, Kulp and Coblentz deserve mention in this connection, while in France Gallard, Picot and Tony Saucerotte have all vaunted the good results of digitalis in pneumonia.

Having spoken at length of the physiological and therapeutical effects of digitalis when lecturing on diseases of the heart, I shall not repeat what I then said. You can readily understand, gentlemen, that digitalis, by its action on the circulation, can have a marked influence on the two manifestations the most characteristie of the fever, the pulse and the temperature. But these antipyretic effects are not obtained without certain dangers, and while recognizing the fact that in the dose of one gramme of the powder of the leaves in infusion or maceration, digitalis produces a remarkable lowering of the temperature, it may, nevertheless, dangerously affect the heart. Therefore, despite the authority of the Strasbourg school, this medication is little employed in our country.

The same may be said of the treatment by quinine, so much in vogue in Germany, and employed with success by Vogt, Wachsmuth, Liebermeister and Jurgensen. But sulphate of quinine in the proper therapeutic dose is a very uncertain antipyretic medicament, and in order to obtain a marked fall in the fever heat you are obliged to give doses which are almost toxic. This is, indeed, what Liebermeister, and especially Jurgensen, have done, for they have administered as much as five grammes (seventy-five grains) of sulphate of quinine in a single dose to a pneumonic patient. It is a dangerous practice, and is to be reprobated, and I would recommend you never to give quinine in pneumonia in large doses, except where there is a marked malarial element in the case.

Along with quinine as an antipyretic we must class veratrum viride and its alkaloid veratrine. Thanks to the labors of Aran, Piedagnal, Norwood, and especially Thibirtz, you know the depressant action of this drug on the circulation; you understand, therefore, why veratrum has been advised in pneumonia. It has been given in the form of granules of veratrine, each granule containing one milligramme (one-sixtieth of a grain), three to five of these grammes being a very full dose. Much oftener you will hear prescribed the tincture of veratrum viride, in the dose of four to six drops [two drops every hour or two till there is a marked slowing of the pulse, is a popular way of giving it in the United States]. I do not think that much success has followed, or is likely to follow this treatment, at least, in this country; it rapidly induces vomiting and collapse, without notably modifying the fever or lessening the duration of the pneumonia.

I shall have finished the consideration of remedies which produce diminution of the pulse and temperature, and which act as antipyretics, when I shall have spoken of the direct application of cold to patients affected with pneumonia. The subject of cold baths in pneumonia (a mode of treatment confined mainly to Switzerland and Germany), also those modes of treatment which, by supporting the system during the evolution of the malady, appeared to me to be far the most rational, I shall reserve for my next lecture.—*Boston Med. and Surg. Journal.*

PRACTICAL POINTS FROM PHILADELPHIA CLINICS.

Dr. Carl Seiler removes polypi from the nasal cavities with the snare, as this causes less bleeding than the polyp forceps, and touches them with galvano-cautery. This prevents the return of the growth, which nothing else will, the doctor having tried iodine, chromic acid, etc. This procedure certainly merits further trial.

Dr. Wharton recommends that superficially situated nævi be cauterized with the strong nitric acid, applied with a glass rod. The resulting

slough is followed by a white cicatrix. More extensive nævi call for other treatment.

For catarrhal, or herpetic, or diphtheritic tonsilitis Prof. Pepper recommends constitutionally absolute rest, large doses of quinine, drop doses of tincture of aconite, and liquid diet, and locally the application of the muriated tincture of iron.

Prof. Tyson often prescribes a mustard plaster prepared with molasses instead of water. For prolonged and mild counter-irritation this acts excellently, as patents often have the plaster on their backs for hours while fulfilling their daily duties. Dr. Tyson also has great faith in jaborandi and its active principle, pilocarpin, in the treatment of uræmia. He considers it *the* remedy for such cases. In Bright's disease and in diabetes the doctor prescribes an exclusive milk diet. He gives only skimmed milk.

Dr. Strawbridge poultices the external ear in the following ingenious manner: He lays the patient's head on the table and fills the external ear with as hot water as can be borne. Over the ear are applied towels soaked in very hot water, the surplus water being drained off by squeezing the soaked towels between dry ones.

For eczematous sores in children and old people Dr. Duhring recommends an ointment of five grains of iodide of lead to the drachm of vaseline.

Dr. Louis A. Duhring recommends for acne, sulphur in some form; preferably the sulphide of calcium internally, and locally the following prescription at bedtime: ℞. Sulphuret. potash, ʒ ss; sulphate zinc, ʒ ss; glycerine, ʒ j; alcohol, fl ℥ j; water, fl ℥ j. M.

Dr. Ellerslie Wallace describes nux vomica as the great invigorator of the sexual organs. He gives the one-half to one grain dose of the extract of nux vomica three times a day after meals.

Dr. John Ashhurst, Jr., says it is the surgeon's rule for ligation of an artery to cut down over the pulsation of the artery where he feels it. Of course the surgeon should know the anatomy of the parts, as well as the lines for cutting as laid down in the books.

Prof. De Costa says do not aspirate pleuritic effusions as long as no urgent symptoms, such as failure of the heart and symptoms of blood-poisoning, demand it, for the liquid will generally re-accumulate, and the second time it will be purulent. Give iodide of potash and other remedies to promote absorption and to make the kidneys act. For the latter the infusion of juniper and jaborandi internally, and dry cupping over the region of the kidney will be often of benefit.

Prof. Tyson divides the treatment of acute rheumatism into three kinds to suit different types of cases. Rheumatism occurring in persons of nervous rheumatic temperament who lead a sedentary life, but are otherwise well fed and clothed, should be treated by salicylic acid or the salicylate of sodium; twenty grains of the latter every four hours for the first twenty-four or forty-eight hours. Continue the medicine after convalescence is established for some time—about as many days as the disease itself lasted. Rheumatism occurring in obese persons who are free livers and who use malt liquors will be best treated by the alkaline treatment. One and a half drachms of bicarbonate of soda in lemon juice every four hours for four days, afterwards twenty grains three times a day combined with iron and quinine. Rheumatism occurring in anæmic persons who have been underfed and overworked should be treated with the tincture of iodine. When the types shade into each other give the salicylic acid with the other treatment. The diet should consist of skimmed milk, chicken or mutton soup, beef broth or other liquid diet. Anodynes and the old "six-weeks-abed" treatment have gone out of date.

Dr. Wm. Goodell, the world-famed gynecologist of the university, recommends for pruritus vulvæ: ℞. Carbolic acid, ʒ j; morphine sulphate, gr. x; boracic acid, ʒ ij; vaseline, ℥ ij. M. And also the patting of the parts with a sponge soaked in boiling-hot water. This is also a most excellent application for that rawness so often found between the thighs of the newly born.—*Med. Herald.*

CANNABIS INDICA: A VALUABLE REMEDY IN MENORRHAGIA.

Mr. J. Brown, of Bacup, observes:—

"Indian hemp has been vaunted as an anodyne and hypnotic, having the good qualities of opium without its evils. Also in dysmenorrhœa and insomnia it has not proved of much benefit. The drug has almost invariably produced some marked physiological effect even in small doses. Text-books give the dose as ten minims and upwards, but five minims is the largest dose that should be given at first. If bought from a good house, the drug is not inert or unreliable. A drug having such marked physiological action ought to have a specific use as a therapeutic agent. Indian hemp has such specific use in menorrhagia—there is no medicine which has given such good results; for this reason it ought to take the first place as a remedy in menorrhagia, then bromide of potassium andother drugs. The *modus operandi* I cannot explain, unless it be that it diverts a larger proportion of blood to the brain, and lessens the muscular force of the heart. A few doses are sufficient; the following is the prescription: ℞ tincturæ cannabis indicæ Mxxx; pulveris tragac. co. ʒ j; spiritus chlorof. ʒ j; aquam ad ℥ ij. One ounce every three hours. Four years ago I was called to see Mrs. W., aged 40, multipara. She had suffered from menorrhagia for several months. Her medical attendant had tried the ordinary remedies without success. Indian hemp was given as above. Its action was speedy and certain. Only one bottle was taken. She was afterwards treated for anæmia, due to loss of blood. Twelve months after this my patient sent

for a bottle of the "green medicine." I learnt afterwards that she had sent this medicine to a lady friend, who had been unsuccessfully treated by another medical man for several months for the same complaint. It proved equally successful. The failures are so few that I venture to call it a specific in menorrhagia. The drug deserves a trial. It may occasionally fail; this, however, is not to be wondered at in a complaint due to so many different causes, and associated with anæmia and other cases of plethora."

Robert Batho, M.D., M.R.C.P., Castletown, Isle of Man, writes in reference to the same subject: "Considerable experience of its employment in menorrhagia, more especially in India, has convinced me that it is, in that country at all events, one of the most reliable means at our disposal. I feel inclined to go further, and state that it is, *par excellence*, the remedy for that condition, which, unfortunately, is very frequent in India.

I have ordered it, not once, but repeatedly, in such cases, and always with satisfactory results. The form used has been the tincture, and the dose ten to twenty minims, repeated once or twice in the twenty-four hours. It is so certain in its power of controlling menorrhagia, that it is a valuable aid to diagnosis in cases where it is uncertain whether an early abortion may or may not have occurred. Over the hæmorrhage attending the latter condition it appears to exercise but little force. I can recall one case in my practice in India where my patient had lost profusely at each period for years, until the tincture was ordered; subsequently, by commencing its use, as a matter of routine, at the commencement of each flow, the amount was reduced to the ordinary limits, with corresponding benefit to the general health. Neither in this, nor in any other instance in which I prescribed the drug, were any disagreeable physiological effects observed.

I could say a few words in its favour, as to its action in allaying irritative cough, but I prefer confining myself to a point on which experience has left me no room for doubt."—*British Medical Journal.*

HÆMOPTYSIS.

Dr. Brown says: Of drugs, ergot seems to be the most powerful in checking hæmoptysis. Thus the extractum ergotæ fluid may be given in doses of a teaspoonful every fifteen minutes, until the hemorrhage is stopped, and then continued in smaller doses, or it may be given by hypodermic injection, in doses of fifteen drops, or ergotine may be used. If the stomach is irritable, ergotine may be given per rectum. Sometimes ergot will have no appreciable effect. Under such circumstances I think that gallic acid is the next best remedy. I frequently combine it with sulphuric acid, which makes a more efficient and pleasant mixture: ℞. Acidi gallici, ʒ ij; acidi sulphurici aromat., ʒ j; glycerinæ, ℥ j; aquæ, q. s. ut. ft., ℥ vj. M. Sig.—A tablespoonful, as required. This is to be given every half hour or at shorter intervals, until the hemorrhage is brought under control. This, I think, ranks next to ergot, and wh re the stomach refuses ergot, or where ergot produces no effect, I usually resort to this combination.—*Med. Brief.*

LOCAL ANÆSTHETICS.

The following formulæ from the *Medical News* may be found serviceable as local anæsthetics for small operations:

Chloral hydrate, gum camphor,
of each.....2 drachms.
Morphia sulphate.....½ drachm.
Chloroform.....1 "

Mix. This may be painted with a camel's-hair brush over the area to be incised; allowed to dry, and repeated as necessary to render the part insensible. Prof. Redier proposes the following:

Ether or chloroform.....2 drachms.
Camphor.....1 drachm.

Mix. Apply with a brush.

Crystallizable acetic acid.....1 part.
Chloroform.....20 parts.

Dissolve. Apply with a brush.

THE CANADA MEDICAL RECORD

A Monthly Journal of Medicine and Surgerv.

EDITORS:

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SUBSCRIPTION TWO DOLLARS PER ANNUM.

All communications and Exchanges must be addressed to the Editors, Drawer 356, Post Office, Montreal.

MONTREAL, DECEMBER, 1883.

COLLEGE OF PHYSICIANS AND SURGEONS, PROVINCE OF QUEBEC—METHOD OF ELECTING ITS GOVERNORS.

There can be no question in our opinion that the feeling of the members of the College of Physicians and Surgeons of the Province of Quebec is against the present method of electing the Board of

Governors of the College. The great mass of the members of the College reside in the country parts, and they complain that although nominally they vote for the representative Governors of their District, yet that vote is counteracted by the large number of the city practitioners, who also have the right to vote for the entire Board. These members, many of them, are connected with Schools, and by the influence among their graduates secure a large number of proxies. In this way these gentlemen are able to run a ticket, and by their own votes and that of their proxies elect the entire Board. In this way it is complained that a District has now and then thrust upon it men who are distasteful to them, and who in no way can be looked upon as representative men. We believe that there is much ground for these complaints, and that it is time that the College set about rectifying them by placing the election for each District in the hands of those who reside in the District. The matter was brought forward at the last tri-annual meeting of the College, and elicited a considerable amount of discussion. It was evident from the remarks which fell from the members who were present that there is a strong desire for a change. The matter was finally referred to the present Board of Governors, who are desired to report on the subject at the Tri-Annual meeting in 1886. There is ample time for the matter to be fully considered. In the meantime we invite correspondence from our subscribers, who feel interested in the proposed change.

REVIEWS.

The Popular Science Monthly for January, 1884.

The Popular Science Monthly commences the new year in great force. It has a varied list of practical articles—"Catching Cold," "The Chemistry of Cookery," "Defective Eye-sight," and "Female Education from a Medical Point of View," while its more theoretical papers are "The Morality of Happiness," "The Control of Circumstances," "The Source of Muscular Energy," and "Idiosyncrasy," a brilliant article by Professor Grant Allen. But the two discussions that will attract most attention are "The Classical Question in Germany," by Professor E. J. James, which opens the number, and "Religious Retrospect and Prospect," by Herbert Spencer. Professor James having just returned from Germany, where he has thoroughly investigated the subject, takes up the now famous "Berlin Report," which has been recently so freely quoted, to show that, according to the experience of the German universities, the classics afford a better preparation than the sciences. Herbert Spencer's article on the Past and Future of Religion is one of the most original and profound pieces of work which that powerful thinker has contributed to the philosophical thought of the present age. It is a clear and forcible statement of the ultimate ground that science must occupy on the relation of evolution to religion. The religious element is demonstrated to be indestructible in human nature; but, as it has hitherto undergone extensive development and purification in the long course of human unfolding, it is destined to be still further purified and exalted by the progress of science and enlargement of the human intellect until all conflict disappears, and religion and science are completely harmonized.

New York: D. Appleton & Company. Fifty cents per number, $5 per year.

PERSONAL.

Dr. James Bell has tendered his resignation as Medical Superintendent of the Montreal General Hospital. His intention is to resume practice in Montreal.

Dr. W. H. Burland (M.D., McGill, 1876) has removed from Montreal to Florida, where he intends to locate.

Dr. Smillie, of Gaspe Basin (M.D., Bishop's, 1882), was in Montreal early in November on his wedding tour.

Dr. W. D. M. Bell (M.D., Bishop's, 1882), of Bear Brook, Ont., became a Benedict in Ottawa early in December.

Dr. Tetrault (M.D., Bishop's, 1880), of Orange N. J., U. S., visited Montreal the end of November on his marriage tour.

Dr. Playter, Editor of the Sanitary Journal, has removed with his Journal from Toronto to Ottawa.

Dr. Kennedy, Professor of Obstetrics in Bishop's College, has recovered so far as to be able to resume day work.

THE CANADA MEDICAL RECORD.

VOL. XII. MONTREAL, JANUARY, 1884. No. 4

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NOTES ON THE USE OF ETHER IN OBSTETRICS.

By CASEY ALBERT WOOD, C. M., M. D., Professor of Pathology, Medical Faculty, University of Bishops College, Physician to the Western Hospital.

(Read before the Medico-Chirurgical Society of Montreal, December 28th, 1883.

Until about a year ago it was my invariable rule to employ chloroform in midwifery, not only for the alleviation of pain during the first and second stages of labor but also for the performance of any of the operations incident to obstetrics. Since that time I have considered it advisable to modify my practice in some respects and to substitute ether, and in this paper I propose shortly to give my reasons therefor, and to ask of members of this Society, whose larger experience warrants their speaking with authority, their opinions upon the subject.

The only apology I have to offer for the assumption that it is possible to come to any conclusions of value in a small number of cases—twenty-six in all—is that attendance upon cases of midwifery where it is necessary to employ anæsthetics, gives one ample opportunity to study their effects in each instance; for the moderately careful observer, who stays up half the night in the endeavor to relieve a parturient female, is likely to have sufficient chances of watching the progress of events and the extent to which they are influenced by the administration of remedies. In those cases where relief is called for in the first stage of labor, examples of which are most commonly found among primiparæ, where a slowly dilating or rigid os is represented by sharp pains, nervous excitability, inability to sleep, and, after a time by exhaustion, I have usually been able to succeed in quieting the patient and obtaining rest by giving her a full dose of chloral; or, if that fail, by administering a few doses of morphia. After a few hours of quiet, dilatation proceeds more quickly, and by the time the effects of the opiate have passed away the labor has progressed to the second stage. In the beginning of October, however, I had a patient who refused to exhibit this satisfactory phase of affairs. She was about to be confined of her second child; had been delivered of her first by the use of forceps after a prolonged labor, and was in great dread of a second ordeal. In addition to her nervousness the membranes ruptured after the os had dilated to the extent of a ten-cent piece, revealing an occipito-posterior presentation. The pains were not very severe or very frequent, but they appeared to exhaust the patient, who insisted upon my giving

her chloroform. I had a bottle of Squibbs' ether with me, and I proceeded to administer the anæsthetic in the usual intermittent way. I noticed, however, that the effect produced corresponded mainly to the *intervals* between the pains, and while it quieted her and gave her some sleep it did not "take the edge" off the pains as chloroform had previously done in my hands. As the affair progressed she seemed to gain courage and strength, rotation was accomplished, and the second stage was passed without the necessity of instrumental aid. As I walked home that night I felt that in that particular instance it would have served my purpose better to have given chloroform. A short time ago I attended a young woman, primipara, who had a long, tedious labor, and to whom I began the administration of ether when the head, presenting in the first position, had proceeded fairly into the second stage. She had been suffering from hemorrhoids for several days previously and was tired out before labor began. I gave her Squibbs' ether during and for a moment before the advent of each pain for over two hours. At the end of that time I endeavored, with the aid of the nurse, to apply forceps, but, owing to the difficulty with which she was brought under the influence of the anæsthetic I was obliged to send for my friend, Dr. Gaherty. With his aid she was safely delivered, and recovered rapidly and nicely from the ether and from the effects of the long labor. I questioned her closely, and she declared that she felt little or no pain from the time of my first administration of the anæsthetic until I determined to apply forceps. This case is a fair sample of my experience in ether administration during the second stage of labor. Where the pains are sufficiently severe, and the condition of the patient such as to warrant it, ether—good ether I mean—seems to me to furnish all the satisfactory results, both as regards its present and remote effects, that chloroform does, provided you give it slightly in anticipation of the pains.

I have had a number of cases of severe hemorrhage following the administration of chloroform given to produce complete anæsthesia while the forceps were used. So much so has this been the case, in my experience, that I have always looked out for at least a smart temporary post-partum bleeding, and usually found it. As far as I can judge from the small number of cases where ether was given I do not think such hemorrhage has been as frequent or as troublesome.

Last summer, however (and this is the only instance where I felt alarmed at the loss of blood following the administration of ether) I applied the forceps to and safely delivered, with the help of the nurse and mother of the patient, a multipara of the lax-fibre variety, whose uterine fibres refused, during the whole labor, to respond to the stimulus of ergot and quinine.

In this case there was much anæmia, resulting from the large loss of blood following the relaxation of the uterus after a primary contraction which expelled the placenta. Two months ago I administered ether to a primapara, aged 41, nervous temperament, average-sized pelvis, first position of the head, after labor had lasted fourteen hours. There was early escape of the waters, and the head was obliged to dilate a rigid os. Opiates only partially relieved the condition, and when the os had dilated to the size of a half-dollar I gave ether in sufficient amounts to relieve the pain, and assisted the dilatation with my index and middle fingers. As soon as possible I increased the amount of ether, and when she was fairly under its influence I applied the long forceps and delivered. In spite of my endeavors to avoid injuring a very rigid perineum she suffered a laceration which extended quite to the margin of the anus. This I stitched up, and patient did well. In September last Dr. Gaherty assisted me in the application of forceps where a similar accident occurred. The patient was completely unconscious from ether for nearly an hour. She made a good recovery. With the assistance of Drs. Perrigo and Gaherty I applied Dubois' forceps, and delivered, of a still-born child, a woman with a contracted pelvis. Here the pains were intense early in the case, and continued so until the delivery of the child. I administered ether early, and she inhaled a fair quantity until the termination of the labor. In each of these three cases the patient said she had but a faint recollection of suffering pain after the anæsthetic was presented to her, and I have no recollection of any difficulty connected with the administration of the anæsthetic.

During the early part of the year, in a case of mine where I had the assistance of Dr. Kennedy, the labor of a primipara, aged 27, was obstructed by a cyst of the right broad ligament.

The presence of the tumor was early made out, and as the pains were violent from the beginning I gave ether in quantities necessary to relieve them. In this instance I have a distinct recollection of the action of the anæsthetic. I found that upon the early pains, which lacked the bearing

down quality, and yet were severe, the ether did not act promptly or satisfactorily. To produce the required anodyne effects I was obliged to anticipate the onset of each pain, and to continue it during the whole period. That is to say, relief was obtained only by the use of almost as much ether as was required later on, when the tumor was punctured and the labor terminated by forceps. The patient made a good recovery. Without multiplying the record of these cases, valuable only as bearing on the question at issue, I would recount the relative merits, *meâ sententia*, of chloroform and ether in obstetrics something as following: (1) Owing to the agreeable odor, early effects, and perfect safety of chloroform as an anodyne agent, it is, without the least doubt in my mind, the agent best suited to alleviate the pain and calm the nervous irritability incident to the first stage of labor. (2) This statement is generally true of the expulsive period, where complete abolition of pain is not the object of the administration. (3) When, however, complete anæsthesia is required, as we find it necessary during the delivery of the child, and for the performance of operations following or preceding delivery, then it seems to me that chloroform largely loses its character as the obstetrical anæsthetic *par excellence*.

If it be acknowledged that considerations of safety must give way, in general practice, to greater conveniences of administration, etc., then, too, in the operations of midwifery, ether must supplant chloroform. If it can be shown that there is anything about the parturient woman which renders her less susceptible to danger during chloroform inhalation which does not equally apply to ether, then the force of this argument is much lessened. So far as I know this peculiar immunity does not exist. We know that it is in the practice of midwifery that the use of anæsthetics is considered least dangerous. By a process of natural selection, as it were, we then have women in the prime of life generally free from disease, with all their nutritive functions in good order—they naturally form the best class of patients to which *any* anæsthetic could be given—and this aside from the theories commonly put forward to explain such immunity from accident, such as increased cardiac development, the physiological cerebral congestion guarding against syncope, brought about by the effects of the uterus to expel its contents, and so on.

Other considerations may serve to modify these conclusions in the minds of practitioners, and the first one is the inflammable nature of ether and its explosive quality when mixed with a certain percentage of atmospheric air. The kindling point of ethereal vapor and of its dilutions with oxygen is low, and when either of them comes in contact with flame an explosion is sure to follow. As the operations of the obstetrician occur frequently at night time this is a serious objection. The difficulty can be greatly overcome by a little care in preventing the near approach of flame to the inhaler or ether bottle, by thorough ventilation of the room, and by the exclusive use of covered lights. A common lamp is a very crude safety lamp, but it is a great improvement upon such naked flames as a gas jet, wax candle, or other unprotected light. I have never had an accident from an ether explosion. I think the danger could be nullified by the use of a modified Davy lamp.

In my experience vomiting is of as frequent occurrence after the use of ether in midwifery as of chloroform, and I do not think it occurs very often in either case. I think it will be generally admitted that, in view of the danger from post-partum hemorrhage, danger to the child and inherent danger to the mother, it would be more advisable to give ether, for its general anæsthetic effects for a long period, say an hour or longer, than to give chloroform for a corresponding period. Now it often happens that one is obliged to administer, in midwifery, an anæsthetic for a much longer time than was first anticipated, in which case it would be at least advisable to substitute ether for chloroform when a commencement had been made with the latter. I assisted, last May, the President of this Society to deliver a woman whose labor was complicated by a labial hæmatocele which had burst and caused considerable hemorrhage. In this instance I am sure that, remembering the length of time she was under ether, about an hour and a half, the ease with which she was kept under its influence, the confidence with which its administration was left for a large portion of the time to the nurse—all these made me feel that ether was the anæsthetic for that particular case. I have here to refer to the matter I have just spoken of—the confidence with which, in view of its greater safety, the administration of ether can be given over to the nurse or to anyone whom the exigencies of the case have left in possession of her faculties.

In country places this rule applies with greater force than it does to city practice; but it often happens that even in the city it is not convenient, desirable or necessary to call in a brother practitioner. In such cases, it seems to me that ether possesses considerable advantage over chloroform. Finally, in labors fatal to the mother, where an anæsthetic has been employed for any length of time—and I have as yet fortunately had no experience of such cases—it may be a relevant question to ask, would it not be a satisfaction to know that ether had been given and not chloroform?

Society Proceedings.

MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

Stated Meeting, Nov. 23rd, 1883.

T. A. Roger, M.D., President, in the Chair.

Uterine Fibroid.—Dr. Gardner exhibited a number of fragments, making up a fibrous polypus he had removed from the uterus of a patient sent to him by Prof. Geo. Ross. The patient, age 48, unmarried, presented no evidence of ever having been pregnant, is very fat, and very anæmic. Gave a history of frequent hemorrhages and watery discharge for a few years, with little or no pelvic pain. On examination, the ostium vaginæ was narrow and rigid; vagina distended to the extent of the pelvic cavity by a tumor of very firm, somewhat elastic, consistence, and uneven surface, about the size of a child's head. The tumor could be partially rotated. Diagnosis from inversion could not be made by the sound, as it could not be passed around the tumor. Under ether, the fundus uteri could be indistinctly outlined through the thick abdominal wall. After incision of the perineum and orifice of the vagina, a running noose of strong twine was slipped over the tumor and drawn tight around the pedicle. A vulsellum forceps was then fixed on the tumor, and successive portions removed, until at last a large portion—the residue of the growth—came away in the forceps. Very little blood was lost during the operation. The pedicle was found to be attached to the anterior wall of the uterus, above the internal os. It was trimmed off, and touched with Churchill's tincture of iodine. The uterus measured three inches in depth. The vagina was tamponed with alum cotton with iodoform—not because of actual hemorrhage, but as a precautionary measure. The patient recovered without a bad symptom. There was no pain worth mentioning, and the temperature never rose about 99.5° F. Microscopic sections made by Dr. Wilkins shewed it to be mainly fibrous in structure. In parts, smooth muscle fibres were to be seen.

Dr. Trenholme said the diagnosis of a polypoid tumor occupying the vagina is usually not very difficult to make out. The mobility of the tumor in this case, and the absence of vesical complication, together with the solid character of the growth, rendered it specially easy to diagnose. As to treatment, he (Dr. T.) had seen a case some time ago where the lady declined any operation, and in which he had simply twisted the tumor round a couple of times, and this cut off its blood supply. A short time afterwards the growth came away by sloughing, and the patient made a perfect recovery. In this case a similar mode of treatment would have been most likely followed with the same success without any operation whatever.

Dr. Geo. Ross said this case ought to be a warning against treating menorrhagia without making an examination. This patient was blanched and weak, and had been treated by several physicians, who never had made any examination of the pelvic organs.

Dr. Gardner also shewed the *uterus* of a woman aged 60, who died last August. The patient, referred by Dr. Roddick, was first seen at the University Dispensary for Woman on 30th January last. Unmarried; no signs of pregnancy. Menses ceased seven years ago. Health always good until a year ago. At the time she had a bloody discharge from the vagina, lasting a week; six months later a similar discharge, lasting three days; three months afterwards a recurrence of the discharge, which has continued to a slight extent ever since. It is pale, and free from clots. Intermittent hypogastric pain prevailed. On examination, abdomen flaccid, a few lineæ albicanteus; cutaneous aspect of perineum slightly lacerated; vagina very narrow and atrophied, slight pale bloody discharge escaping. Bimanual examination reveals distinct enlargement and decided firmness of uterus; it is mobile. Cervix small, admitting with difficulty an Emmet's silver probe the size of an ordinary sur-

gical probe ; this entered four inches, causing free bleeding. The diagnosis then made was intra-uterine malignant growth. A month later patient returned for treatment. She was put to bed. The os was incised bilaterally, as no laminaria tent fine enough for introduction could be got. Successive tents were then introduced, until the finger could be inserted within the uterine cavity. A soft, easily broken down growth was at once detected. The sharp curette was used freely, and a large quantity of brain-like substance removed. Hemorrhage was free, but soon arrested by Churchill's solution of iodine and plugging. The result was undoubted, but temporary relief. After the pain and slight fever following the operation had subsided, symptoms returned, and in about two months later, after labor-like pains for a few days. a portion of the recurrent growth was found projecting through the now dilated orifice. The curette being again used, a much larger quantity of the same substance than at the first operation was removed. Decided, but temporary, relief again followed. After this she lived four months, suffering much from pain, fetid, but not bloody, discharge, diarrhœa, rigors, high fever and perspiration. Death took place from exhaustion. At the autopsy, made by Dr. Osler, the uterus is decribed as being enlarged eight times its normal size : it fluctuates, and is soft. Examined from the vaginal os, it presents a ragged, sloughy-looking mass projecting from the upper and left side. On section, the entire inner surface is involved in an extensive sarcomatous growth which has sloughed on the surface, and presents dark shreddy, soft disintegrating portions. The margin of the os is free, with the exception of one spot, at which the portion already noted projects. In places the growth is an inch thick. At one spot of the posterior wall the growth has perforated. Ovaries and broad ligaments unaffected. A secondary deposit was found on one pleura. During life, an elevated spot the size of a ten-cent piece existed on the anterior vaginal wall ; this had the some histological character as the growth in the uterus. Microscopic sections of the substance removed from the uterus during life showed the structure to be numerous small, round cells, with very scanty stroma.

Dr. Gardner said that in some quarters the treatment adopted might be considered as open to criticism. The most favorable cases for extirpation of the uterus were those of sarcoma. Freund's operation by abdominal section he considered absolutely unjustifiable. If the uterus is ever to be extirpated, it should be done by the vagina, after Schroder's method. The great size of the uterus, and the narrow vagina, rendered the case unfavorable even for this method. He quite agreed with Dr. Reeves Jackson of Chicago in the views he put forth at the meeting in September of the American Gynecological Society in Philadelphia. Dr. Jackson believed that extirpation of the uterus, instead of saving life, had destroyed many years of life.

Dr. Trenholme remarked that if ever we were warranted in extirpation of the uterus, this was such a case. The uterus, though large, was free, and could readily have been brought down and removed. However, the fact of Dr. Osler finding secondary cancer deposits in the lungs shows that perhaps it was as well not to have attempted it. The smallness of the vagina, in his (Dr. T.'s) opinion, did not preclude the operation, if otherwise desirable. In cases of midwifery, cases are now and again reported where the whole vagina had been torn up to Douglass's fossa, and yet patients made good recoveries. Where necessary, we could divide the vagina and complete the operation.

Dr. Osler exhibited *a heart showing ulcerative endocarditis*, and remarked that we have had exhibited at our Society the two kinds—one, quickly fatal, with typhoid symptoms ; the other more chronic. The case was diagnosed ulcerative endocarditis by Dr. Wilkins. The patient had also acute pneumonia. The heart shewed old sclerotic vavles with deposit of lime salts. One of the chordæ tendineæ was ulcerated across. The cavities were dilated, and the left side hypertrophied. The spleen was also enlarged, and had numerous infarcts through it.

Case of Puerperal Eclampsia.—Dr. A. L. Smith read a paper on this case. He saw his patient about the seventh month, who complained of pains in her head, back and lower part of abdomen ; said she felt silly, and saw things upside down. Micturition painful and frequent, but urine scanty in amount, high colored, and loaded with albumen. Feet and eyelids swollen. A few hours later, was sent for, as she had taken a fit. Used a mixture of alcohol, chloroform and ether as an anæsthetic ; this arrested the clonic spasms, but unconsciousness remained, broken only by recuring seizures till evening, when a consultation with a senior *confrère* was sought, and twenty leeches

to the temples recommended. As the last leech fell off, consciousness returned, and she steadily regained her usual health. She was kept in bed on a strictly milk diet for several weeks, during which time the albumen decreased rapidly. Four weeks later Dr. Smith delivered her of dead fœtus, much decomposed. She made a perfect recovery. Dr. Smith lays his success to the bleeding and rigorous milk diet, as recommended by Dr. Donkin, whom he quoted at some length.

Dr. GARDNER said that the efficacy of hypodermic injections of morphia or Liq. Battley was extraordinary in these cases. He had used it frequently with very satisfactory results, even where convulsions came on weeks before labor.

Dr. Ross said the question of bleeding was divided. His own experience went against it. Only once saw good results follow, and that time the patient was a small, weak woman. He had several times seen strong plethoric women bled without any benefit. Has found chloral, given early, very useful, but morphia more reliable, and recommended hot air baths.

Dr. TRENHOLME said the pulse was a good indicator to bleed or not. If strong and bounding in a full-blooded person, believed bleeding to be the best treatment. convulsions came on some time before full time, then an opiate would be good. If at full time and os dilatable, give chloroform and deliver. He agreed with Dr. Smith's treatment of his case as regards the form of bleeding and milk diet.

Dr. GARDNER spoke highly of hot air baths in these cases.

Dr. RODGER said he had treated a good many cases of puerperal convulsions. Used to bleed if the person was strong, but of late, in all cases, uses hypodermics of morphia. Chloroform or ether have not given satisfaction, nor has he seen the good effects from chloral and bromide of potassium which others speak of. Some time ago had a patient six months pregnant, with 75 per cent. of albumen in her urine, who had a convulsion. He gave her a hypodermic of half a grain of morphia, repeating it in six hours. She had no more seizures till three weeks after. Again he used the morphia which stopped them for two weeks more, when pains came on, and she was delivered of a dead fœtus.

Stated Meeting, Dec. 14th, 1883.

DR. RODGER, PRESIDENT, in the chair.

Syphilitic Caries of inner table of skull.—Great thickening of Calvaria—Compression and Deformity of Brain.—DR. OSLER exhibited the skull-cap and brain. The patient, a woman aged 35, had been in hospital many times during last six years with various symptoms of constitutional syphilis. Was not under regular constitutional treatment in the intervals. At one time had necrosis of right tibia. In November, 1882, was admitted with a small open sore in right parietal bone through which dead bone could be felt, and a probe passed far in between the bare bone and dura-mater, towards the vertex. Symptoms chiefly debility and severe right unilateral headaches. Was in hospital several times within last year, and amyloid disease of kidney was made out. During her last illness, as on the previous occasions, her intellect was clear, and although within a few days of her death she was dull and very irritable, it was probably due to the severe pains in her head and her increasing weakness. Never had any signs of local brain disease. The headaches were very severe at night. The external surface of the skull-cap was smooth, and on the right side, close to the coronal suture, was a small sinus through which a Bowman's probe could be passed. On removing the calvaria, which was moderately thickened in the supraorbital regions, a quantity of thick pus escaped. The dura-mater was thickened and strongly adherent posteriorly. The internal surface was smooth and did not present any adhesions. As shewn in the specimen, the disease is confined to the contiguous surfaces of skull and dura over the frontal and part of the parietal regions. The inner aspect of the bone in these parts is rough and carious, having an eroded, worm-eaten appearance, and covered with granulations; and towards the parietal bone, firm, solid fibrous masses unite it to the dura. The upper half of the frontal and the greater part of the parietal bones are thickened, measuring from two to three centimetres, and are exceedingly dense. The outer surface of the dura-mater shews numerous soft granulations springing from solid fibrous tissue. The falx in its anterior half is thickened, and the longitudinal sinus is in this part obliterated. The brain shewed no trace of coarse disease; the arachnoid was a little opaque, but the pia-mater was normal. The hemispheres were curiously deformed from the pressure to

which they had been subjected by the thickened bone and dura, and the pus between them. They are wedge-shaped, the base is at the occipital bones, where the greatest vertical height is eight centimetres, and the apex is at the orbital margin of the frontal lobes, where the height is only two-and-a-half centimetres. This curious deformity has been brought about slowly, and illustrates the degree of pressure to which the brain may be subjected, so long as it is applied gradually.

Dr. Henry Howard referred to the remarkable absence of cerebral symptoms in such extreme compression.

Dr. Osler also exhibited a skull from the museum of McGill College, with syphilitic destruction of the entire right parietal and part of the frontal bones, with caries also of the inner table.

Epithelioma of Tongue—Excision—Erysipelas—Circumscribed Gangrene of Lung—Perforation of branch of Pulmonary Artery.—Dr. Shepherd narrated the case and showed the specimen: Thos. W., aged 42, a strong, healthy man, came to the Montreal General Hospital in January, 1883, suffering from epithelioma of the tongue; this being near the tip, only a portion of the tongue (right half) was removed with the scissors by Dr. Fenwick. Two months ago he noticed that the growth was returning, and at the time of his re-admission into hospital, under Dr. Shepherd, early in November, it was increasing rapidly. He then had an epitheliomatous ulceration of the part of the tongue that remained, and also of the right tonsil and left anterior pillar of fauces; the floor of the mouth was infiltrated and hard. It was decided to remove the whole tongue. This was done on November 10th. Dr. Shepherd first ligatured the lingual artery of each side by a curved incision reaching from the front of the angle of the jaw to the hyoid bone, and up towards the symphysis. After ligaturing the linguals, the tongue was removed by scissors with very little trouble and no hemorrhage, after Mr. Whitehead's method. The right tonsil (or part of it) and the anterior pillar of fauces were removed also by scissors. After the operation the patient rallied well, and was fed for two days by nutrient enemata, the mouth being rinsed out frequently with a solution of Condy's fluid. For five days the man did well; there was no fetor from the mouth, the wound was granulating nicely, and the incisions made for tying the lingual were healing by first intention, when, on Nov. 15th erysipelas appeared on the nose and rapidly spread over face, neck and head. Temperature rose to 103°–104°, and pulse became rapid (120) and weak. The erysipelas then spread over the chest, and the mouth now became sloughy; fetid breath was first noticed on Nov. 27th, at which time a slight cough developed, and some bronchitis, which was looked upon as septic. No rigors or sweatings had occurred. From this time patient became gradually weaker and weaker, in spite of the stimulating treatment, and died suddenly on December 2nd from hemorrhage. Dr. Shepherd remarked that at the time of the operation several cases of erysipelas had been admitted into the hospital from outside. With regard to the operation, he felt perfectly satisfied with it, the previous ligaturing of the linguals greatly facilitating the removal of the tongue by scissors, as all fear of hemorrhage was removed, and the scissors left a clean, instead of a bruised, surface, as is seen after the use of the écraseur. The method of operating had nothing whatever to do with the fatal result.

At the autopsy the wound looked in process of healing, and the cancerous masses had been removed. The linguals presented thrombi at the site of ligature. There was a small pocket of pus beneath the left sterno-mastoid. The trachea and bronchi were filled with blood. The right lung presented four areas of circumscribed gangrene, the left two, each about the size of small apples. Placing the lung under water and blowing water through the pulmonary artery, bubbles escaped from one of the gangrenous regions close to the root of the lung. Dissection proved, as the specimen shows, that the hemorrhage came from a small branch of one of the main divisions of the artery, which had been opened in the necrotic process.

Dr. R. P. Howard spoke of the frequency with which gangrene of the lungs followed operations on the tongue and neck.

Dr. Geo. Ross mentioned having had a case of cancer of the œsophagus in hospital last winter which proved fatal from gangrene of the lung.

Sarcoma of Lumbar Glands; Perforation of the Colon; Persistent Hemorrhage.—Dr. Shepherd presented the specimen, and gave the following notes: Man, aged forty-five, large, strongly built, weighing over two hundred and fifty pounds; sent for him on July 23rd, and stated that he had

been seized in the night with severe pain in the back and abdomen. The temperature was 103°, pulse, 120; tongue coated; great tenderness of abdomen, with fulness in left iliac region; no vomiting; bowels had been opened several times during the night. In the evening he was worse. Temperature, 104°; pulse, 120; great abdominal distension with tenderness. On the 25th the temperature was normal, but the abdominal symptoms persisted, and there was diarrhœa and frequent vomiting. On the 29th he had a severe rigor, with temperature of 104°, and profuse sweating; tympanites and pain, with evidence of peritonitis. In a day or two he had another rigor, with severe vomiting and diarrhœa, and great abdominal distention. Dr. Ross saw the patient in consultation, and the conclusion arrived at was, that there was local suppuration deep in the iliac region. His condition at this time was very bad; pulse weak; vomiting incessant. With champagne and careful feeding the vomiting was checked, and he began to improve slowly, until in the early part of September he was able to move about the room. There was still fulness on deep pressure in the iliac fossa, but the thick layer of fat prevented a satisfactory examination.

About September 10th he began to pass a small quantity of blood—bright red—with the stools, and this increased until the daily amount was often as much as half a pint, and he became very anæmic. In the month of October he again took to bed; had severe rigors with high temperature and sweats, about every other day. At this time a tumor was made out in the hypogastric region, deep in the abdomen, fixed, solid, and not tender on pressure. Rectal examination negative. The loss of blood continued, and he got much weeker, and death took place on November 20th, after a profuse hemorrhage. The tumor had increased in size, and a week before death it seemed about the size of a child's head, and firmly fixed in the hypogastric region. The autopsy showed matting together of the coils of intestine with old peritoneal adhesions, particularly near the pelvis. The tumor was in front and a little to the left of the lumbar spine, and the sigmoid flexure was firmly united to it. The mass was readily turned out, and dissection revealed an extensive perforation of the bowel, as the specimen shows, and exposure of soft sloughing masses of the tumor. The wall of the colon was defective in an area two and a half by one and a half inches. The growth was a sarcoma of the retroperitoneal lymph glands. There were no secondary tumors, and nothing of note in the viscera. The persistent hemorrhage for over two months had evidently come from the vessels of the exposed and sloughing part of the tumor. The repeated rigors were difficult of explanation; there evidently had been peritonitis, but whether local suppuration had occurred was not so clear, possibly it had in the progress of perforation of the bowel.

Dr. Geo. Ross remarked that he had seen the case several times, and it had offered considerable difficulty in the way of diagnosis. The amount of abdominal fat prevented a satisfactory examination, and the fulness in the iliac region was thought to be possibly a focus of suppuration. Later on, when the hemorrhage occurred, and a more evident tumor could be felt, the diagnosis was made of malignant growth, and from the situation and size, probably retroperitoneal and involving the bowel.

Dr. R. P. Howard said that from the same symptoms he would have diagnosed as did Drs. Shephard and Ross. He congratulated them on having located the tumor so exactly.

Small Tumor on Nerve: Intense Brachial Neuralgia; Removal.—Dr. Shepherd presented a microscopic section of a small tumor the size of a bean, which he had removed from a man's arm for painful neuralgia. The patient, a thin, nervous man, stoker by occupation, was admitted to hospital complaining of severe pain in the left arm—so bad that he could get but little rest at night. His appearance was that of a man suffering intensely. The pain was more severe at times, and was situated at the insertion of the deltoid, and from there ran down the back of the arm to the elbow. He also had numbness along the ulnar nerve. Just below the posterior fold of the axilla, internal to the brachial artery, a small nodule, the size of a bean, was felt, which on pressure caused agonizing pain. Dr. Bell admitted the case as one of neuroma. Dr. Shepherd had removed the growth, which was found connected with a small nerve, and closely united with the cellular tissue at the back of the artery. The man has had no pain since the removal, three days ago. The section of the tumor showed a fibrous capsule, and a small, angular-celled growth inside.

TERTIARY SYPHILIS—CEREBRAL, LARYNGEAL AND RECTAL.

Dr. OSLER exhibited the specimens, and Dr. GEORGE ROSS read the following history :

L. R.—Æt 36, brought to hospital November 25th, 1883, in following condition : Almost complete paralysis of left arm, legs and right side of face, eyes fixed and staring, deviating to right; pupils moderately contracted ; eyeballs prominent ; no reflex on touching *left* cornea ; both upper eyelids droop slightly, control over both bladder and rectum ; tongue protruded to left side ; when, with difficulty roused, answers questions rationally in whispered voice. (Sensation to pain, though dulled, is present in all extremities. No numbness or wasting of muscles.) Plantar reflex present in left leg, absent in right ; can draw left leg up when asked to do so ; offers very slight resistance to flexion and extension of left arm, but when raised and let fall it is quite lifeless ; complains of pain in right occipital region of head. Temperature °97½ 'F ; pulse 50, regular ; respiration regular, 16 ; urine contains no albumen, no casts ; lungs and heart normal.

Patient has been under treatment for syphilitic affections of larynx, eyes and neurosis of palate and (super max bones). Had severe headache during whole summer.

History.—Went to bed in usual health on Friday night, 16th inst., four days before admission. Aroused her husband in the night, acted strangely and threw things at him.

On Saturday morning, 17th, acted rationally and had no complaints. Husband noticed she had something the matter with arm (left) in afternoon. On Sunday morning the paralysis was as complete as on admission ; fell out of bed, and had to be lifted in.

(Lungs and heart normal ; liver, dulness, normal).

Nov. 24th. Bowels not moved, given enema, quantity of matter (pus and stringy mucus) coming away. More inclined to sleep and breathing heavier ; no reflex from right cornea to-day.

28th. Better ; slight internal strabismus of right eye ; speaks fairly well, considering that a hole, size of a quarter dollar, in roof of mouth.

Dec. 4th. Quantity of matter constantly coming from rectum for last few days. Digital examination shows a firm stricture, admitting barely index finger about one inch from sphincter, completely around bowels. Has hard dry laryngeal cough Reflex excitability now present in left eye, absent in right.

5th. Right eye much inflamed and a large corneal ulcer has formed.

6th. Patient more dull ; considerable stridor in breathing. Examined by Dr. Major—Paralysis of adductors of right side and general stenosis as a result of it.

She gradually sank, and died on the 8th.

The brain presented extensive syphilitic disease at the base and in the right Sylvian fissure. The right temporo-sphenoidal lobe was firmly adherent in the middle fossa, and both dura and pia mater thickened and adherent. The fifth nerve, just as it entered the Gasserian ganglion, was involved in a mass of gummatous tissue, growing beneath, and attached to the margin of the tentorium. The nerve, for a quarter of an inch was swollen, and the fibres separated. The right optic nerve, close to the commissure, was surrounded by recent infiltration, and was inflamed and swollen to nearly double the size of the left nerve. The right sixth appeared involved, but the third was free. The right temporal and orbital convolutions were firmly united together by thickened and infiltrated tissue. The right middle cerebral was small, and a few lines from its origin passed directly into a gummous mass whieh surrounded it for nearly half an inch. The membranes in the fissure beyond this were free, and the arteries small and full of white and red thrombi. The vessel in the gumma was quite occluded. The anterior cerebral artery contained a tolerably firm clot. The other vessels and the rest of the base looked normal. There was red softening of the convolution and parts supplied by the middle cerebral, particularly of the island and the ascending convolutions. Both nuclei of the corpus striatum were softened. The right optic disk was slightly swollen, but the intense neuritis evident near the commissure did not extend the whole length of the nerve.

There was extensive destruction of hard and soft parts of the palate, and ulceration of upper part of pharynx, and in the nose. The larynx presented advanced syphilitic disease : ulceration of both cords—most of the left. The greater part of the thyroid cartilage was neurotic, broken into three or four segments, and surrounded with sloughing tissue. There was suppuration beneath the sterno-thyroid and thyro-hyoid muscles.

The anterior part of cricoid cartilage was also necrosed. The rectum presented a large area of ulceration, and a short distance within the anus there was cicatricial tissue in the form of an annular ring.

Dr. Henry Howard remarked on the frequency of cerebral syphilis, and gave his experience of its connection with acute mania and other forms of insanity.

FIBRO-GLIOMA OF UPPER END OF ASCENDING FRONTAL GYRUS; JACKSONIAN EPILEPSY OF FOURTEEN YEARS' STANDING; THE LEG-CENTRE.

Dr. Osler read a report of the case, and presented specimens and drawings in illustration.

The case occurred in the family of a medical man, and was remarkable from the length of time during which the convulsions had lasted, and the limitation of the lesions. After preliminary remarks on cortical epilepsy and the value of pathological cases in localizing the functions of the brain, the notes furnished by the Doctor were read, of which the following is an abstract: "Mary—, aged fifteen years and nine months. When sixteen months old fell on her head from the table and appeared to be much hurt, but recovered without any serious effects. Five months after, the left hand was noticed at times to be stiff and firmly closed. This continued to increase in severity and frequency for three months, when the leg became similarly affected, and two months later she was confined to bed, as the paroxsysms had become general. For eight or ten weeks the seizure continued in this violent way; sometimes she had eight or ten in an hour. No loss of consciousness; then, after lasting for about seven months, they ceased, and she ran about apparently quite well.

She remained free from spasms for a year, when they returned and ran much the same course for six or seven months, and she then again recovered for about the same length of time. This went on until her eleventh year; months in which the spasms were severe and months in which she was quite free. One of the attacks is described by the Doctor as follows: "suppose her at the dinner table. She would suddenly say, 'Oh? I am going to have a spasm' (she knew this by the contraction of the left hand); she would then jump up and go to the sofa, get a cushion, lay it down on the floor, then lie down with her head on the pillow, and then jerk away in a spasm for half a minute or a minute; laughing or talking all through it, and never losing consciousness. She would then get up, replace the cushion, and come back to the table and finish her dinner." About six years after the illness began, the left leg began to show signs of weakness, and gradually the foot turned in. During her eleventh, twelfth, thirteenth, and fourteenth years, the seizures were very bad, and she had no prolonged intervals. For six weeks, at one time, she lay unconcious, and had from fifty to eighty spasms in the twenty-four hours. As the attacks became less frequent she was able to sit up in bed or in an easy chair, and read or do fancy work. Last Christmas, when she was fifteen years of age, the spasms suddenly ceased, and she was ten months without one. A week before her death they returned with great violence, and increasing frequently until they became almost continuous, and for two days there was coma. Three hours before death they ceased, and she passed away quietly. The left arm and hand were weak, not wasted; the left foot was flexed inwards at right angles, and firmly fixed in that position. In reply to questions, the Doctor gave some additional particulars. The spasms always began in the left hand, and appeared to extend to the leg first, and then to the face. The intellect was clear, and she was though without special instruction, beyond her years in intelligence and general information. The clinical history may be briefly given as follows Cortical epilepsy for fourteen years; remarkable intermission of from six to twelve months. Spasms began in the left hand, at first monobrachial, then extended to the leg, afterwards became unilateral, and finally general. No loss of consciousness for some years. Weakness of left arm, permanent contracture of right leg and foot. Intellect unaffected.

The brain was large and well formed, dura-mater natural, no adhesions or spots of thickening on the pia-matter, vessels much congested, hemispheres symmetrical, no wasting of convolutions of puckering. In slicing the organ *pre-frontal* and *pediculo-frontal* sections normal. A section three centimetres in front of the fissure of Rolando showed nothing abnormal. In making the *frontal* section, the knife passed through a hard resistant mass in the right hemisphere, occupying the upper end of the ascending frontal convolution. The knife passed exactly two centimetres in front of the fissure of Rolando, and the mass occupied the superior fasciculas of the white fibres, nowhere reach

ing the surface and scarcely touching the gray matter. In this exposure it measured fourteen millimetres in width by sixteen in vertical extent, and was eight millimetres from the surface of the paracentral lobule, ten millimetres from the top of the gyrus close to the longitudinal fissure, and fifteen millimetres from the external surface of the convolution. In a section seven or eight millimetres behind the *frontal* the mass was visible as a small round puckered portion just at the edge of the gray matter, at the bottom of a small sulcus passing into the ascending frontal gyrus from the fissure of Rolando. The mass occupied the upper end of the convolution, and had an antero-posterior extent of about seventeen millimetres, and a vertical of fifteen or sixteen millimetres. It was almost entirely within the white matter, but touched upon the gray at several spots. It had a fibrous appearance with ill-defined borders; and vessels could be seen in it. The *parietal* and other sections were normal. The right crus was badly torn, and no sclerosis could be seen, but the right half of the medulla was smaller than the left, and presented evidence of descending degeneration. The cord was not examined.

Histologically the mass appears to be a fibro, glioma. The delicate fibre elements are in excess-but there are many large cells with prolonged fibrillar process. The blood vessels are numerous. So far as examined, the cells of the gray matter in much the immediate vicinity did not appear to be altered.

Dr. OSLER remarked that lesions causing cortical epilepsy were rare in the white matter, but this one was close enough to the gray cortex to induce the irritative effects and the excessive motor discharges causing the convulsions. Gliomata were slow-growing local tumors, and instances were on record of nearly as long duration as in the case under consideration. Dr. Jackson had described one of ten and another of twelve years' standing. The remarkable intermissions were strange features in these cases; periods of quiescence alternating with periods of excessive irritation. The situation of these lesions was of interest in connection with the crural monoplegia and contraction. The tumor occupied largely the anterior portion of the paracentral lobule, the region which has been found affected in the few recorded instances of paralysis of one lower extremity of cerebral orgin. The leg-centre is placed in this lobule by Ferrier and Charcot, and this case is in confirmation, as we may reasonably conclude that the lesion, by interfering with conduction from this centre, induced the paralysis and subsequent contracture.

Dr. HENRY HOWARD said: This was, perhaps, one of the most interesting cases that ever came before this Association,because the pathology of the case fully explained all the phenomena exhibited, while the patient was living. We perceive that there was motor convulsions, but no loss of consciousness. The diagram before us shows the reason why the disease was confined to the higher motor centres; the sensory centres been free. With the exception of motory convulsions the patient had otherwise enjoyed good health; muscles and cellulur tissue well developed. The reason is obvious. The moter nerves that suffered are not the nerves of nutrition. Nutrition depends upon the sensory nerves, and their centres, in this case, were normal. If all pathological investigations showed us cause for effect like the case under consideration it would be a great satisfaction to the physiologist.

DR. HAMMETT HILL., of Ottawa, narrated the case of a lumberman who was struck on the head with a pike, and received a depressed fracture. He had severe seizures, and was trephined with success, and he had no fits for eighteen years, after which they recurred at long intervals, possibly due to bony thickening about the seat of trephining.

Early Symptoms of Tabes dorsalis.—DR. STEWART exhibited a man, aged 33, clerk, whose only complaint was of dimness of vision. He first noticed failure of his sight ten weeks ago. Three weeks after he consulted Dr. Buller, who diagnosed the case as one of Tables dorsalis. Twelve years ago he saw double for a week. In the year 1879 he recollects seeing double for about three days. With the exception of these two occasions, and a few days during which he was sick from measles, he has always enjoyed excellent health. He never had syphilis. The family hsitory is unimportant. Three years ago he worked for several months in a very damp cellar.

Present state:—There is permanent contraction of the right pupil (myosis). There is loss of reflex contraction of the pupil (Argyll Robertson symptom). Both pupils readily contract on accommodation. In addition to the loss of reflex contraction, he has also undoubted loss of reflex dilatation of the pupils. There is well marked

atrophy of both discs. The patellar reflex is absent in both legs. This is the only symptom characteristic of Tabes dorsalis present, with the exception of the eye symptoms. There are no lightning pains, no paresis of the bladder or rectum, no ataxia, no delayed, lost or perverted sensations. The skin reflexes are present. Notwithstanding the absence of some of the prominent symptoms, there can be no doubt whatever about the nature of the case. It is an undoubted case of Tabes dorsalis in its pre-ataxic stage. The case is a good example of what is now generally conceded, viz., that Tabes dorsalis is essentially a disease of the sensory tracts. Three of the most prominent sumptoms are failure of the normal reflexes. There is (1) loss of the reflex contraction of the pupils; (2) loss of reflex dilatation of the pupils; (3) loss of the patellar reflexes.

Treatment.—During the last seven weeks the patient has been treated with the *faradic brush* three times weekly, after the manner recommended by Rumpf of Bonn.

In reply to questions asked by members, Dr. Stewart said that his patient probably contracted the disease while working in the damp cellar three years ago. The patient was slightly worse now than when he commenced the faradic brush treatment.

Dr. Buller here remarked that one eye was a little better, the other rather worse, than when first seen. The patient consulted him on account of failing vision. He found his sight much impaired R. E. V., 20′ 100; L. E., 20′ 70, with great concentric limitation of the visual fields. The field for colors was constricted in a similar manner, but there was no central scotoma. The optic nerves presented the usual appearance of progressive atrophy from spinal sclerosis. The condition of the eyes, together with the absence of patellar reflex, seemed to warrant the diagnosis of *Locomotor Ataxia.*

Dr. Osler asked if the verylearly symptoms were pre-ataxic, as it was well known that the eye symptoms often preceded for a long time lightning pains, etc.

Dr. R. P. Howard said that one of the first cases diagnosed in Montreal was one of his patients, who came to him suffering with transient strabismus, his walk was slightly axatic, but there were then no pains, he lived 15 or 16 years, and died in Europe last year. He had myosis.

Dr. Henry Howard remarked that he has had several cases under observation where impotency was the first symptom.

Dr. Osler, the past summer, had a patient under his care who had been troubled with double vision, and severe headache for four or five years. He went to London and consulted Dr. Broadbent, who diagnosed and treated him for cerebral syphilis. He got perfectly well, but two years ago Tabes began to develop, and now he is in the third stage of Locomotor Ataxia.

Dr. Ross said a patient came under his care yesterday in the hospital, who had had the gait symptoms for two years, but till lately had had no eye symptoms at all. At present he is remarkably ataxic, has loss of patellar reflex, no lightning pains. Dr. Ross had asked Dr. Buller to examine this patient.

Dr. Buller remarked that the hospital patient with ataxic symptoms, sent to him by Dr. Ross for examination yesterday, had no loss of vision. His optic nerves, however, did not present a healthy appearance. They were somewhat swollen, and the margins decidedly indistinct, perhaps presenting the condition described by Dr. Gowers as gelatinous infiltration. The bulk of the papilla had a hyperæmic appearance, whilst the temporal side was in part rather unusually pale. On the whole, I think the condition was such as we usually meet with in persons whose vision is beginning to suffer from excessive use of tobacco and alcohol. With regard to the atrophy of the optic nerves met with in Locomotor Ataxia, Dr. Gowers has made the observation that when this condition comes on early in the course of the disease, that is, during the first or pre-ataxic stage, the resulting loss of vision is more rapid and more complete than when occurring as a later symptom; this observation coincides with my own experience of such cases. When atrophy of the optic nerve occurs early it must, I think, often be a matter of doubt as to whether the trouble is of spinal origin at all. I know of several cases in which atrophy of the nerves has led to complete blindness, which has now lasted for one, two, or three years without the development of any fresh spinal symptoms, though there has all along been absence of knee-jerk, yet all of these cases have been regarded as commencing Locomotor Ataxia by the very highest authorities on the subject, both in Europe and America.

Dr. R. P. Howard said he had three cases of Locomotor Ataxia at present. In two, there is great contraction of the pupils—one a gentleman, the other a lady. The gentleman has myosis of both eyes, but greater in one. In the third case the pupils differ, there is good vision in one eye, Dr. Howard remarked that a contracted pupil should make one look out for Tabes. There is great frequency of pulse in one gentleman and in the lady. The gentleman took Hyosciamin for a long time under Dr. Seguin, with but little effect. Dr. Howard said a late theory was that this disease was caused by functional excess of a sensory nerve, and that sexual excess was said to lead to it. Dr. Howard also remarked that out of many cases which he has seen, one only suffered from gastric crisis. Had used the electric brush in the case of the lady, with the result of restoring feeling in some parts of the skin, otherwise no improvement followed.

Dr. Henry Howard had used the electric brush for anæsthesia with good effect where there was absence of motor paralysis.

Lawson Tait's Operation.—Dr. Armstrong exhibited the ovaries and tubes removed by him, a couple of days previous, from a lady, aged 22, who had suffered for three years from pelvic pain. She had menstruation for fourteen days for the past year, suffering much each time; this quite unfitted her for work, and made life miserable. Both ovaries were prolapsed. Patient doing well. The ovaries were both a good deal enlarged.

Meeting held, December 28th, 1883.

The President, Dr. Rodger, in the chair.

Dr. Wood read a paper on "Ether in Obstetrics."

This paper will be found among our original Communications.

Dr. Campbell said that during the past twenty years he has used anæsthetics very little; does not think it wise to give chloroform for hours, as some do; has noticed that the uterus does not regain its power as promptly when this is done. He saw an objection to ether in its smell and its being so irritating to the eye. Dr. Campbell believes the mental condition has much to do with the immunity from deaths with chloroform at this time. The woman approaches the period for delivery without fear, knowing so many of her friends have safely passed over this trouble, whereas the person to be operated on by the surgeon has a dread, often for a long time before.

Dr. Reed remarked that if there were no deaths recorded from chloroform during labor then chloroform must be better than ether, as it has all the advantages without the objections. The statistics stood thus with regard to mortality: chloroform 1 in 3 thousand, ether 1 in 30 thousand, and gas 1 in 50 thousand.

Dr. Smith believes in easing a woman as much as possible, and has used and will use even for hours, if necessary, an anæsthetic composed of alcohol one, chloroform two, and ether three parts; has never seen flooding follow its use, and feels safe to allow a nurse to give it.

Dr. Trenholme has only used chloroform during labor. With regard to the use of anæsthetics during labor is now more opposed than ever. When called to a woman, and finding the first pains irritable and the os thick and firm, instead of using an anæsthetic for hours he administers 45 minims of laudanum; this gives ease from pain and find they don't recur for a week or even a month, as often these are cases of false pains. Was sent for by a woman who said she had come to full term, but on examining found the above conditions present, gave her 45 m. laudanum; pains did not return for a month, when found her as before; gave another 45 m. laudanum,—she went on for another month, when he was sent for again, and as the indications were present wanted to give another dose, but the woman said she had carried the child for eleven months, and would not carry it a year for anyone. She was delivered two or three days later. Dr. Trenholme said that very tedious long labors left the woman more prone to post-partem hemorrhage. He also remarked that the heart was more fatty during gestation, which would look as if anæsthetics ought to be dangerous in obstetrics.

Dr. Hy. Howard said that in his younger days anæsthetics were not known, and of course not used in midwifery cases, but that in Ireland the pains of labor were often lessened by taking a good dose of whiskey punch, he never saw harm come from it.

Dr. Campbell thought that Dr. Reed's statistics were not strictly true, as he believed there were cases in Montreal where the woman died from flooding due partly to the chloroform used.

Dr. Rodger has used anæsthetics largely always; used chloroform till within a few years; has seen post-partem hemorrhage follow its use. Now uses ether, but finds it not so useful as chloroform for irritable subjects in the first stages; but for such cases he now gives a good dose of chloral. The great advantage ether has over chloroform is that you can dispense with an assistant in an instrument case, and feel perfectly easy while the nurse is giving the ether. In an instrument case before giving either anæsthetic he gives a dose of ergot to ensure good contraction.

Dr. Wood asked if any of the members had noticed whether their epileptics had anæsthetic spots.

Dr. Hy. Howard said that nearly all the epileptics with mania have anæsthetic areas over the body or limbs.

Mastitis treated with ice—Dr. Campbell mentioned a case of inflamed breast apparently on the way to suppuration, and beginning in the usual way with sore nipples, which he was treating with applications of ice. The breast, which was very much enlarged, is now terminating by resolution, and is only one half its former size.

Dr. Trenholme said this was an old treatment; that in most cases the inflammation begins in the lacteal sacks and that each opens at the nipple. Hot applications congest and increase the danger of its spreading to other catyledons, but that ice isolates the inflammation.

Dr. Campbell related a case where he had confined a woman and left her well; in three weeks he was sent for, as the baby was vomiting pus. On squeezing pure pus came out of both nipples. The breasts were poulticed, and in 36 hours they looked like two bags of matter and discharged enormous quantities.

Dr. Campbell confined this same person lately, and now she nurses well from both breasts.

Dr. Trenholme reported that one of his cases of removal of both ovaries and tubes, operated on three and a half months ago, was now able to enjoy life thoroughly; she skates, and recently had walked seven miles.

Progress of Science.

CLINICAL LECTURE.

By G. M. Lefferts, M.D., Clinical Professor of Laryngoscopy and Diseases of the Throat in the College of Physicians and Surgeons, New York.

Before entering upon the subject of our lecture to-day, I would make a remark with regard to a man who presented himself at our clinic two or three weeks ago with a ten cent piece in the pharynx, for doubtless you will be interested in hearing the result. I told you at the time that of course the first surgical procedure was to undertake to get the foreign body out by intra-laryngeal methods, take some form of forceps and grasp the ten cent piece and gradually withdraw it. Should the body be found to be so impacted that it could not be removed in this way, then open the air tube at the crico-thyroid space, the same as in laryngotomy, pass in forceps curved upward, seize the coin and withdraw it through the artificial wound made, and then bring the edges of the wound together by sutures. That was what we proposed to do. Two or three times the coin was grasped, but each time the instrument slipped. It was difficult to get an instrument which would catch it at the right point. On the following Friday, this being on Thursday, the man had a violent attack of coughing, and coughed the coin up. The coin disappeared; the man then looked for it, but could not find it. He probably coughed it up into the mouth and swallowed it.

I am going to talk to-day about the subject of chronic nasal catarrh, a subject, as I have already said, of interest to all medical men because they see so much of it. Patients will come to you, having made their own diagnosis of nasal catarrh, and insist upon it that you treat them for that affliction. They imagine from descriptions given in quack books on nasal catarrh, etc., that they are going to take on the bad smell there described, and insist upon it that you must treat them and prevent it.

Now, if the patient have the disease, it is not likely that it will proceed to the extreme form of fetid catarrh, which is still more rare than ozœna, and I believe, as I have before said, that ozœna has nothing to do with nasal catarrh. It can only occur in the syphilitic patient whose nasal bones are necrotic, and where the diseased organ keeps up a constant fœtid discharge and a nasal catarrh, and sets up a stinking there, the same as a diseased bone will do in any part of the body. The same thing may happen in scrofula. Under these two circumstances, then, you may have this fetid, stinking disease, but only under these two circumstances. Ozœna, understand me, is never nasal catarrh. The only form of nasal catarrh that can be stinking is that form which we designate atrophic or fetid catarrh. We no longer call everything nasal ca-

tarrh. It is an incomplete, unsatisfactory diagnosis, and I never want a physician to make a diagnosis and tell me it is nasal catarrh. If he doesn't know what form of nasal catarrh it is, then he is ignorant of the subject in hand. He doesn't know how to treat the case. Call it one of the forms of chronic rhinitis. These forms are three in number.

First, ordinary, simple nasal catarrh—simple chronic rhinitis. These persons are not likely to go to the doctor, for they are not troubled much with the symptoms, and they put it off day after day, week after week, and month after month, until the simple form becomes a chronic nasal catarrh. This process, I say, goes on, and causes pathological changes ; the mucous membrane becomes thickened, it becomes hypertrophic, and narrows the nasal passages. This is the form of the disease which you will be called upon to treat. The symptoms become more or less annoying, the patient notices that there is something wrong with his nasal apparatus, and he comes to you for relief. Now, you can do an immense amount of good for that patient. You can cure this form of disease, and add greatly to your reputation.

But, suppose the patient does not heed this form of the disease, and allows it to go on. Then the hypertrophy of the mucous membrane becomes permanent, and begins to contract, as fibrous material will do in any part of the body, especially where it is left after a chronic inflammatory condition. It contracts, and as it contracts it draws the mucous membrane down upon the bony walls. It obstructs the numerous little glands which keep the parts soft and pliable by the secretion of mucus. The parts become dry and harsh, and the scanty mucus, now changed in its character, becoming muco-purulent, constitutes clots in the nasal passages. It scabs over passages, mucus is poured out beneath the scabs and remains in situ, decomposes and stinks, and the patient is in the condition of fœtid nasal catarrh. It is one of the results of the disease.

The second result is that it causes atrophy of the turbinated bone ; atrophy of the structure upon which this mucous membrane lies. Such a condition in atrophic or the fœtid form of nasal catarrh is always accompanied by an extra wide nasal passage. This fact is of assistance in diagnosis. When you see an abnormally wide nasal passage, so that, as in some cases, you can look directly through either nasal passage into the pharynx, and you find an impact dry membrane, and hard, greenish-yellow discolored pus pent up beneath it, you can make the diagnosis at once ; it is that of atrophic or fœtid catarrh. This form of disease, gentleman, is very rare, and only occurs as a consequence of other forms of the disease where they are allowed to go on for months or years entirely neglected by the physician.

Chronic rhinitis, ordinary, simple, every-day chronic inflammation of the nasal mucous membrane—what we call the simplest, the mildest, the most unobtrusive, form of nasal catarrh. There is the one symptom, and that is a discharge of mucus. The glands are involved in the chronic process, and their walls throw out a free secretion, which is simply hyper-secretion of mucus, loaded down perhaps with cells. I say that in this form of simple chronic catarrh there is simply a hyper-secretion from a chronic inflammation of the nasal mucous membrane. There is no thickening yet of the mucous membrane ; there is no hypertrophy of it ; and, consequently, there is no stopping up of the nose which changes the voice more or less, and makes one uncomfortable because of the difficulty of breathing through one or the other nasal passages ; and, consequently, no interference with smell or perception of savor. There is simply a recurrence of cold in the head ; a susceptibility of the mucous membrane to cold, and the patient must use the handkerchief or draw the secretion down the throat. This is the whole story. Now, when patients come to you to be treated for this affection you must be able to diagnose it, and be able to tell the patient exactly where he stands in the pathological scale, so to speak.

You must remember that this disease may lead to another form, and you must let your patient know that you cannot cure him if he persist in exposing himself to the cause. And, also, let your patient be convinced at once that you cannot cure him in as many days as the disease has existed for months or for years ; that time is requisite, and if he will give you an opportunity to make regular systematic applications to his nasal catarrh such, all, nasal catarrhs, can be cured.

Now, what are you going to do for the patient ? In the first place, cleanliness is absolutely essential. What earthly use is there to apply medicated solution, or a medicated powder, to the mucous membrane in the hope of medicating it, when it is covered up with a film or layer of mucus ? The next moment the patient blows his nose, and out comes the application which you have made. You have done no good.

I say absolute cleanliness in this form of nasa-catarrh, and in all forms of nasal catarrh, is absolutely essential. It is the foundation of the whole matter of treatment. It is the corner-stone. On the other hand, the nasal douche, as generally sold at the drug stores, is utterly useless. A few years ago these instruments were used ten times as much as they are at present. In other words, we know that it is not necessary to use these instruments in this class of cases as often as we did five or ten years ago. I hold that the use of a high pressure of water through the nose is unnecessary. The patient may think it necessary, and some may so treat him, but this all wrong. In the chronic or fœtid form of catarrh the patient is unable to blow out the plug of dried-up secretion, and it is absolutely necessary to do something which will aid in removing them, but in this simple form of chronic rhinitis I believe more harm is being done than good by the use of these instruments for washing

out the nasal passages. The mucous membrane is inflamed, and if you pass over it a stream of water under pressure you will keep up the state of chronic inflammation. Many times I have seen chronic inflammation of the nasal passages caused by the injudicious use of the douche or of medication. But there are also cases of even simple chronic rhinitis where it is necessary to wash out the passage. Make your examination with the nasal speculum anteriorly, and you will see there simply a reddened mucous membrane–no hypertrophy, no thickening, no plugging up or stoppage of the nasal passages. Look and see whether the nasal passages are clean. See whether there is thick mucus, and, if so, you must give the patient something that will remove it. But if he keeps the mucous membrane perfectly clear and free by blowing the nose, so that the medicine will reach it, then a cleansing apparatus is not required. If it is necessary to wash out the passages, then give the patient the necessary apparatus to do it with, and have him use it properly, and only as you direct. Do not give patients a post-nasal syringe, and tell them to use it, and allow them to go on using it when they please, washing out the nose perhaps five or seven times a day.

Now, what apparatus shall you recommend to your patients? Here, gentlemen, is the best apparatus that I know of for the purpose. It is simply a spray, as you can readily see, and let me say at once that the nasal douche has long proved ineffectual in cleansing the nasal passages. The upper part of the nasal passages are never, or are very rarely, washed by the ordinary nasal douche. The post-nasal syringe is extremely inconvenient for use. The majority of patients will not use them. The best means for cleansing the nasal passages is the coarse spray. This washes up the secretions, and you could accomplish with very little fluid in such an apparatus what it would take a great deal of fluid not to do with the nasal douche. In using the spray the patient must breathe through the mouth, and thus the whole nasal passage and vault of the pharynx are cut off from below. As long as the attention is kept on the breathing the velum will remain up against the post-pharyngeal wall, and the fluid will not pass downward into the throat, and thus the spray will rush about in all directions where it is desired. Then let the patient lean forward and blow the nose gently, never hard. Never hard, I repeat, because the fluid may be blown up the Eustachian tube and cause inflammation there. Here, then, gentlemen, is a marked advance in the cleansing process over the use of a quart of salt water in a nasal douche. This apparatus will do the work, do it effectually, gently, and a great deal better that any nasal douche ever did it. You may use, as a cleansing solution, the following receipt :

℞. Acidi Carbolici..... ℈i.
Sodæ Bicarb.....
Sodœ Biboratis.....
Aquæ Rosæ aa..... ℥i.
Glycerinæ..... ℥i.
Aquæ, ad.....Oi.

It may be necessary to use this prescription every day or perhaps only twice a week. Remember that the cleansing process is only preparing the way for the use of your medicated application.

Now, what are you going to use as an application? We must be careful not to do too much; not to cause an inflammation. I would lay it down as a cardinal rule that no cleansing, no application or medicament made to the nasal passage should ever cause the slightest amount of irritation. The patient should be made comfortable, and not uncomfortable by the application, for hours or the entire day. If the patient feel uncomfortable it is a sign that harm has been done rather than good. Never make application too strong or repeat it too often.

A second point, one that is to remember distinctly, is that the nose will not stand an application which the pharynx or the larynx would stand. In other words, the same strength solution which you could apply with immunity to the pharnyx, or even to the larynx, would not be borne for one moment by the nasal mucous membrane. It would give the patient pain. Therefore, always commence with a light, mild application, studying to adapt the strength of the application, to each particular case in hand.

Now I will give you an application which may be used in this form of the disease, or in the next form which I shall mention, in which hypertrophy has commenced, an application which I use perhaps more than any other. You may, however, use any of the ordinary mild mineral solutions, if you please, but make them mild. Those which are applicable for the pharyngeal mucous membrane may be used for the nasal mucous membrane, if you will make them sufficiently mild.

Now, how shall you use them? By the spray; if you have no other form of apparatus you can use the one here. If, however, you have another form, whereby you can get the spray behind the velum, and spray upward into the posterior nares, thence forward into the nasal passage, you can make a much more thorough application than you can possibly do by the anterior spray. But if you cannot get this, then use the anterior spray, driving it backward. I say that any one of the astringents in the pharmacopœia may be used, but the following is that which I use most. This is to be used, of course, after the nasal passages have been thoroughly cleansed, if cleansing is necessary.

℞. Iodine Cryst.....gr.iv.
Iodid. Potass..... .....gr.x.
Zinci Sulph. Carbolate.....
Zinci Iodid. aa..... ℈i.
Listerine ..... ℥ viii.
M. Ft. Lotio.....

Now what is Listerine? you will naturally ask. It is a preparation lately put upon the market, which makes a very pleasant menstrum for this mixture. It contains boracic acid, and has an odor of wintergreen, which is very pleasant and agreeable. It is antiseptic and disinfectant. It is entirely unirritating to the mucous membrane, and containing boracic acid, it is healing in its properties.

The application of a powder sometimes will answer a very good purpose, if the secretions are soft and fluid, so that the powder will be absorbed by them. In cases where crusts form on the nasal mucous membrane, and the parts are dry, you should never use a powder; but where the parts are soft, moist, and there is plenty of secretion to take up the powder, it probably remains longer in contact with the mucous membrane than a solution used as a spray. You can use alum, or tannic acid, and apply as you like. Here is a powder blower for the purpose, which can be used from the anterior or posterior nares.

Such, gentlemen, is the treatment according to the indications in ordinary chronic rhinitis and certain grades of hypertrophic nasal catarrh. I have told you that hypertrophic nasal catarrh exists when hypertrophy has taken place in the mucous membrane, and all the glands at the vault of the nasal pharynx are involved concomitantly. This hypertrophy blocks up more or less completely the inferior portion of the nasal passages, the hypertrophy taking place over the inferior turbinated bones; very rarely over the superior. Since there is also hypertrophy over the vault of the pharynx it is better to make the application through the posterior nares rather than through the anterior nares alone.

But after a time there is no use of treating a case in this way. A patient comes to you and tells you that one or other of his nostrils is continually blocked up, you look into the nasal passages, and instead of finding it roomy on both sides, you find a large, irregular, thick mass. You find, perhaps, if you make an examination posteriorly, that there is a condition of the posterior part of the turbinated bone which almost completely blocks up the nasal passage. If in such cases you follow the above simple plan of treatment you will throw so much time away. There is only one thing in such a case that you can do, and that is to treat the case surgically, and by so treating it you will gain an immense amount of credit: you will get the credit of curing an extreme case of nasal catarrh. In such a case, I say, you will see on looking into the nasal passage, a round, thickened piece of mucous membrane rolling out into a great round fold, as it were, and you infer at once that it is hypertrophy of the mucous membrane; and by the side of it you see a very narrow, sometimes a completely closed, channel; and above, perhaps, you see the middle turbinated bone swollen out in a similar manner. Now, if you take a probe and press upon this mucous membrane, instead of finding it in a normal condition, you will find that it recedes deeply, and shows no signs of elasticity. In such a case you want to relieve the obstruction to the passage of the air to and through the patient's nose, for this is the symptom of which he complains.

Now, here is an operation which you can all do. It is to illuminate the nasal passage, and take a tuck as it were, in the mucous membrane; and when a scar forms it will draw down the membrane, and hold it there. When operated upon in that way, the patient is rarely if ever again troubled in the same way. Take a small bit of cotton, and roll it about a cotton holder in this way, so that a small wad is made; dip this into fuming nitric acid, press out the excess of acid so that there shall be no danger of its dripping on the patient's lip or the passages; then dilate the nose widely, throw a strong pencil of light from the forehead mirror into the nasal cavity; now burn an ulcer on the swollen mucous membrane, so that it shall contract and draw the parts back into place, then make an application of an alkali, so as to neutralize the acid, and the operation is done. There has never, in my experience, been any return of the disease after a single application of the acid. Now, I know, gentlemen, of no single operation in the whole range of nasal surgery which will do as much good as this one. The operation is painful only for a moment. Some prefer glacial acetic acid to nitric acid. The hypertrophied membrane over the inferior turbinated bone may be removed by passing what is called jarvis snare through the nasal passage into the pharyngeal space, bringing it down over the hypertrophied mucous membrane, encircling it and bringing it home. It is intended to cut the hypertrophied tissue very slowly, so as to avoid hæmorrhage.

Atrophic nasal catarrh I believe to be incurable. All that you can do is, by thorough cleansing of the nasal passages by the solution in spray, to keep the parts clean, prevent the secretion from decomposing and causing fœtor. Do not tell such patients that you can cure them, but that you can relieve them by keeping the parts clean.—*Nashville Journal of Medicine.*

ABSTRACTS FROM A PRACTICAL TREATISE ON DISEASES OF WOMEN.

[Translated from the French of Dr. G. Eustache by THOMAS C. MINOR, M.D., Cincinnati, O.]

PART FIRST—MEANS OF DIAGNOSIS.

The study and the diagnosis of the *diseases of women* requires a special series of manipulations and explorations with which the practitioner must become familiarized. These methods of investigation, or rather of diagnosis, so far as regards absolutely special methods applied to gynecological inquiry, are few in number, *i.e.*, four—1st, digital examination; 2nd, the speculum; 3d, uterine catheterism; 4th dilatation.

In the first chapter will be discussed some of the general considerations relative to the means employed in conducting a gynecological investigation and making a correct diagnosis, such a preliminary course being necessary before resorting to treatment.

CHAPTER I.—GENERAL CONSIDERATIONS.

The nosological determination of the different morbid affections of women is surrounded by very great difficulties, hence, errors in diagnosis are frequent; these errors may consist, not only in confounding two maladies of the same organ, but also in mistaking two diseases having absolutely different situations and points of origin.

Many of the diseases of women are dependent on an anatomical or functional derangement of the various portions of the genital apparatus and belong, properly speaking, to the domain of *gynecology*, constituting what is commonly designated under the name *diseases of women;* the lesion is local, the disturbance more or less general. But the primordial lesion, by the date of its appearance and the persistency or intensity of its special symptoms, necessarily attracts the attention of the patient and the physician, and its seat, if not its nature, is very easily determined.

But in a very considerable number of cases the inverse occurs; the general symptoms are developed, and have acquired little by little a very great intensity; the local symptoms are null or nearly so; the patients, if they are unmarried or childless, will not admit of the possibility of a disease of the genital organs, and refrain from calling the attention of the physician thereto—growing offended if their medical attendant presumes to question them upon delicate points, and continuing to complain without ceasing of the existence of disease of the stomach, lungs, brain, etc. They may be possibly right in this, as they may be wrong. It is the physician's duty to recognize, amidst this maze of contradictory statement which professional politeness requires him to listen to patiently, the true condition of the woman.

Finally, it may happen that any disease, following its usual progress, may induce consecutive modifications in the functions of the genital apparatus—modifications that assume exceptional and even capital importance in the eyes of many patients when they have (in reality) no signification. If the physician, under such circumstances, does not discriminate between what is told him and that which his own skill determines, he will fail in his diagnosis and be disappointed, for instance, by treating a leuchorrhœa or uterine granulations when his patient is purely and simply consumptive.

The *diseases of women* may then be the subject of many errors, 1st, they may be unrecognized when they exist; 2d, they may be admitted when not existing; 3d, they may co-exist with other affections more or less obscure, the correlative importance of which it is most often difficult to determine.

The physician, called under such circumstances, must surround himself with all the means possible in order to determine the truth; there are two methods to be necessarily employed which both possess great importance, 1st, *interrogation*, from this he will learn *the history of the patient*, which will make him acquainted with all the *subjective symptoms* that have existed or still exist; 2d, the *physical examination* of the genital organs and the neighboring parts, which will exhibit the *objective* symptoms. It is only by exactly following this method that our information will be complete, and merit the title of a real clinical observation.

Interrogation of Patients.—Asking questions properly is a very difficult thing to do; women have a multitude of details to describe and are prolific in information, and the physician will be unwelcome in the majority of cases if he attempts to cut short the usual prepared narration; he must submit quietly, as it is important for the doctor to gain the confidence of his patients for the purpose of finally obtaining the answers he desires, and especially inducing them to submit to the necessary physical examination. If this method is followed the physician can soon ask the questions himself and pursue his interrogations systematically without being diverted from the subject of his inquiry. The answers are from thence, more clear, more precise and much less liable to lead into error.

As a general rule, after having taken the name of the patient, her age and social condition, the physician is informed of the malady for which he is called, of the nature of the pains experienced, of the date of their first appearance, of the progress of the disease, etc. He should insist on the patient describing her present condition, and allow her to afterwards describe her anterior condition of health and the subject of heredity. If the physician is led to suspect a disease of the genital organs, he should none the less, before pushing questions too far on that point, study the condition of the different systems, nervous, respiratory, circulatory, digestive, in a word. explore and know the significance of the modifications or functional and organic troubles of the economy.

It is always of the highest importance in treating the diseases of women, to be fully informed as to the manner in which the functions of the bladder, rectum, pelvic organs, muscles and nerves are performed. After investigating these different points, questioning as to the condition of the genital organs should be resumed; it is very important to interrogate the patient, particularly as to what is called her sexual history, that is to say menstruation, inter-menstrual discharges, pregnancies, and even in certain cases as regards her sexual relations with man, that which the English designate by the name of *parenina*.

Under the head of menstruation should be noted the first appearance of this discharge, whether it has been regular or irregular from the time of its establishment, the duration and the quantity of the

flow—and finally, if the woman is advanced in years, the date of its cessation. Menstruation in place of being normal is morbid ; it may be in excess (menorrhagia], or deficient in quantity (amenorrhœa), or it may be accompanied by pain (dysmenorrhœa), which sometimes precedes, sometimes follows and is sometimes in a manner continuous.

Intermenstrual discharges are no less important to note. Their quantity, quality, order and persistency, and finally, under some circumstances, their chemical and microscopical properties should be successively investigated.

Anterior pregnancies, their number, their date, and principally the first and last accouchments, the duration of the labors, method of delivery, whether natural or artificial, the after puerperal conditions, the development of the lacteal function, and all the consecutive order of things relative to childbed, including the time spent in bed before returning to ordinary domestic avocations, are all circumstances which tend to throw light on the history of either uterine or periuterine maladies. Precisely the same attention should be devoted to the question of previous abortions and the conditions preceding or following such accidents.

The physician should be extremely cautious in asking his questions relative to sexual connection, and such interrogation should only be followed in cases of absolute necessity.

The pathological and sexual history of a woman thus carefully studied will seldom fail to reveal the localization of the disease in the organs contained in the lower pelvis and particularly in the genital organs. It is necessary to recognize, however, all those signs which are only probable. If we desire to acquire more exact information, to precisely localize the disease and separate it from other affections of the same organ or the same apparatus, it is absolutely necessary to resort to a direct exploration of the parts, as they only can give the *certain* evidences of the malady.

II. *Physical Exploration.*—Exploration of the genital apparatus is *external* or *internal*.

The first consists in investigating the condition of the parts situated in the hypogastric region and lower pelvis, by *inspection*, *palpation*, *percussion*, *auscultation*, *mensuation*, etc., that is to say by a series of methods applied to the surface of the skin. We commence our investigation in this manner, and patients offer but few objections and usually submit.

The second method (*internal*), on the contrary is followed within the natural orifices, so that the intra-pelvien organs are directly investigated ; the condition of these organs is ascertained in various manners, to the end that we may afterwards more exactly appreciate their physical condition. It is evident that *internal* exploration is without doubt that which will furnish the most positive information, and that by following this method we not only are able to make an absolute diagnosis of a disease of the genital organs, but also a *differential* diagnosis of all such diseases.

But if internal exploration is necessary, it is very often difficult to obtain the consent of the patient, who has a natural repugnance to such a procedure. Under such circumstances the physician must employ an extremely delicate tact to overcome the usual feminine objections, and thus induce the woman to tolerate the examination without absolutely demanding the favor.

The following lines, quoted from Gallard (1), will serve as a guide in all such cases :

" Remember that it is always necessary to obtain the consent of your patient and avoid demanding such a privilege. If you are a young physician resort to circumlocution and tact in asking such a privilege from a young woman, whose sense of modesty will be shocked and whose feminine feelings will revolt at the bare mention of the method to be employed. If the examination be demanded under such circumstances an irrevocable refusal often follows. When you can convince her to the contrary by your attitude that the examination desired is nothing unusual in such cases ; if you will maintain a calm and dignified professional air ; if after feeling the pulse, auscultaing the lungs and heart, you touch the belly and simply and naturally say that it is necessary to practice the touch, the woman will never dream that back of the physician who examines her she might find a man, and will unhesitatingly submit herself to all the examinations which a doctor deems essential.

In all cases remember the axiom, the physician should never impose an examination on a patient unless such a procedure is absolutely necessary. The physician who respects himself will only ask for that which is judged indispensable, and after making the request he must not allow a non-compliance with his wishes, if he does not desire to lose all moral authority over his patient. In the face of an obstinate refusal there is only a single line of conduct to be followed ; this is to absolutely refrain from prescribing any treatment, and by pursuing such a course of action make his patient understand that such action is based solely on the ground that it is impossible to successfully combat a disease whose nature is unknown, and that treatment in such a case would not only be unsuccessful but even perhaps injurious. It is likewise necessary to carefully avoid making too persistent entreaties in order to induce the patient to decide and then reproach her for a refusal to submit to your examination. A cold and reserved, but at the same time a kindly, attitude is the only position to be worthily maintained in such an emergency. It is only by assuming such an air that a woman will be led to understand how exaggerated her scruples are, and thus induce her to repent her previous determination."

These councils and precepts are too important to be omitted from this chapter,

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1. Gallard, Lecons Cliniques sur les maladies des Femmes. Paris, 1879.

III. *Methods of Exploration.*—The various methods of exploration which may be used for examining the internal as well as the external genital organs of women are furnished by the different senses, but especially by the touch, the eye and the ear, and may be classified in the following manner :

- 1st. Touch
  - Immediate
    - Abdominal palpation.
    - Percussion.
    - Touch
      - the vagina.
      - the rectum.
  - Mediate
    - Double touch (the vagina and rectum touched at the same time.)
    - The vaginal touch combined with abdominal palpation or bimanual exploration.
    - Uterine catheterism.
    - Vesical catheterism.
- 2d. Sight
  - Immediate
    - Inspection.
    - Speculum.
    - Examination of liquids drawn off by aspiration.
  - Mediate
    - Microscopic examination of liquid and solids taken from parts affected.
- 3d. Hearing
  - Stethoscope
    - Sounds depending on pregnancy.
    - Sounds depending on circulation in fibrous tumors.
    - Crepitation.
  - Immediate Mediate
    - Sounds preceived directly by the ear and produced by percussion.

CHAPTER II.—TOUCH.

The touch, that is to say, the exploration of a natural cavity by the aid of one or more fingers properly introduced in the rectum or vagina alone, or in both cavities at the same moment, it may be employed singly or combined with abdominal palpation. The following divisions in which this method may be usefully employed may be thus enumerated :

1st. *Simple vaginal touch.*

2d. *Vaginal touch combined with palpation or bimanual exploration.*

3d. *Rectal touch.*

4th. *Double touch, vagina and rectum are touched at the same moment.*

Within a recent period, Weiss and Simon have insisted on the merit of the *vesical touch* or the *digital exploration of the bladder.*

I. Vaginal Touch (Simple).—*Position of the Woman.*—The vaginal touch is practiced with the woman either standing on her feet or reclining on a lounge. Under some circumstances the examination should be made in each of these positions, for the purpose of exactly appreciating the situation of the organs and the modifications induced by the influence of gravitation; however, the examination in the standing posture should be the exceptional one, and may be considered as a complimentary measure.

In order to practice the touch standing. the woman should support herself against some piece of furniture, the thighs moderately separated, the body inclined forward in such a manner as to relax the abdominal muscles; a very good plan is to have the patient lean forward holding on the back of a chair, resting her hands upon the shoulders of the examining physician who is on his knees before her, or seated upon a low stool.

In order to practice the touch where the woman is reclining, we have to choose between the different positions. The best and most simple of methods consist in placing the patient flat on her back, the thighs slightly flexed upon the abdomen and moderately separated, and the head raised by a pillow; it is also advisable not to permit the pelvis to sink very deeply into too soft a mattress as, when this happens, the hips have to be raised up again and supported by a bolster.

This is the position almost universally adopted in France and the European continent and likewise in America.

The English prefer the *left lateral position*, that is to say, the woman rests on her left side with the thighs slightly flexed upon the abdomen; this is also the English position in childbirth. But if this position presents some advantages in the exploration of the posterior part of the pelvis, it offers serious inconveniences in the examination of other portions and, moreover, cannot be used for the simultaneous application of abdominal palpation, and should, therefore, be rejected as a general rule, or at least only resorted to in certain special cases. If this examination, when completed, is to be followed by other methods of exploration, the woman should lie across the bed, as in that position the speculum is commonly used.

Method of Proceeding.—The woman being placed in the sacro-dorsal position, the surgeon, after anointing the index finger of his right hand with some fatty substance, such as olive oil, glycerine, comoline, or vaseline, raises the bed-covers slightly with his left hand and carries the right hand and forearm forwards between the thighs of the patient, in such a way that his right elbow may rest slightly upon the bed ; this move ment may be made without uncovering or exposing the woman.

At the moment when the right hand is thus passed under the bed-clothes, the thumb is abducted, the index finger stiffly straightened, and the three remaining fingers flexed in the palm of the hand, which rests on the side, its radial

border turned forward, its cubital edge backwards. The hand is then carried forwards following the internal and posterior face of the right thigh until the index finger touches lightly and rests upon the perineum. At this point the wrist should be made to describe the arc of a circle from the back forwards and the tip of the index finger will glide over the perineal plane and reach the fourchette which it passes and gently drops into the vulvar orifice.

After the finger enters the vulva, it is carried forwards following the anterior wall of the vagina, passing to its full length until it reaches the neck of the uterus. During this progression, the thumb is gradually relaxed in such a way as to lodge its length in the right crural folds; while the three disengaged fingers are gradually extended and directed forwards, the inter-gluteal folds and finally the commissure which separates the index from the middle finger comes to embrace the fourchette. This change in the position of the fingers is very advantageous and very important, for the index finger may be thus more deeply inserted; the perineum and soft parts may be forcibly raised, and it is rare, even with fingers of medium length, that we are not able to reach in this way the promontory of the sacrum (sacro-vertebral articulation).

The finger on touching the bottom of the vagina, meets the neck of the uterus, at which point it is easy to examine the anterior lip, the orifice, and the posterior lip in all their circumference, appreciate its size, situation, consistency, then the finger may be passed into the left lateral cul-de-sac, the posterior cul-de-sac, the right lateral cul-de-sac and finally forwards into the anterior cul-de-sac. During these various examinations the hand executes a movement of circumduction, in such a way that the tip of the index finger should be always turned towards the point to be explored.

It is often useful, at the moment of exploring the various cul-de-sacs, to press strongly upon the perineum in order to raise it up as high as possible, to the end of reaching the highest points, even those situated beyond the vagina and uterus, up to the entrance of the abdominal cavity.

When the exploration of the deep parts is terminated we bring the index finger forwards in order to learn the condition of the anterior vaginal walls, the bladder and the urethra; the finger is then carried backwards against the posterior vaginal wall, which surface is explored its full length, and the finger, finally, slowly withdrawn.

The touch practiced in this manner, is sufficient in the majority of the case; it is applied to all circumstances, to all diseases; it is an easy method of examination, applicable even to *virgins*. However there are certain cases where the introduction of two fingers, the index and the middle simultaneously, presents certain advantages by allowing us to explore more deeply, and thus permitting us to appreciate more exactly the size, weight and mobility of the uterus, when we resort at the same time to abdominal palpation practiced with the other hand.

Touch is generally practiced with the right hand; there are cases, however, where it is necessary to use the left hand, owing to the position of the bed or by reason of the seat of certain lesions; so a surgeon should be *ambidextrous*.

Information Furnished by the Touch.—In order to clearly appreciate the information furnished by the touch it is absolutely necessary that the physician should have had a long experience with examinations of perfectly healthy women; when this is the case the information desired is invaluable, and we reiterate the opinion that of all methods of gynecological investigations the touch is the most important, that it is necessary to resort to it in all cases, and which should, in case of need, supplant all others. In fact, by means of touch, there is no organ whose healthy or pathological condition cannot be completely appreciated and understood.

The sensibility of the vulva, its irregularities of surface, its congenital or acquired narrowness, spasmodic contraction, etc., are almost immediately revealed. The dimensions of the vagina, its length, temperature, spasmodic or fibrous contractions, sensibility, condition of tumefaction, softness, induration, dryness or moisture, and even the presence and nature of tumors, may all be readily discovered. The uterus may be almost completely explored, not only in its intravaginal portion, but also in the sub-vaginal portion of its neck and body. The finger carefully passed over its surface perceives the volume, consistency, sensibility, situation and the mobility or fixity of the uterus, as well as its smooth, wrinkled, depressed or protuberant characteristics. The orifice of the womb may be explored and all its peculiarities noted; we can even, in certain cases, penetrate its interior and discover the irregularities of its mucous membrane and of the tumors projecting from its surface, following pedicles to the seat of their implantation at points more or less close to the fundus. Across the various cul-de-sac, the finger perceives the condition of the body of the uterus, and we are often able to determine its size, its direction, more or less abnormal, its fixity, its adherences, and, in addition, various organic degenerations.

This method of exploration also enables us to determine more exactly than any other the condition of the large ligaments, the pelvien peritoneum, the fallopian tubes, and even the ovaries.

In a word, the vaginal touch is the arch-stone of gynecological diagnosis; the precious information it furnishes us is better, more complete, and more precise when, after having employed the method alone and learning all it teaches, we add to it abdominal palpation, and resort to what the English designate by the name *conjoined examination*, that which I shall term *bi-manual exploration*.

II. Bi-manual Exploration.—The woman lying extended on her back, the surgeon practices the

touch with the right hand, and at the same time places his left hand on the patient's abdomen at the level of the umbilicus, while the right hand is engaged in exploring the deeper internal parts, the left hand is gradually passed downwards towards the pubis. and the fingers progressively depress the abdominal walls as in hypogastric palpation, being forced as deeply as possible into the cavity of the pelvis.

If the woman is thin and docile, this double manipulation is very easily accomplished, and the exploration of the uterus, especially, can be made absolutely complete. To succeed in this, the movement of the hands should occur simultaneously. The finger in the vagina, applied to the neck of the uterus, should be pushed upwards and backwards, so as to hold the womb firmly, while the left hand depressing the abdominal walls, and dipping deeply into the cavity of the pelvis, rests upon the back of the organ. The distance separating the two hands measures the dimensions of the womb, almost as exactly as could be determined by a necroscopic examination ; at such a moment we can perceive the situation, surface irregularities, etc., of the organ examined.

In a general way, the uterus being in a state of physiological anteversion, the vaginal finger pressing not upon the inferior extremity of the neck, but upon its anterior wall,which is pushed upwards and backwards, determines a rocking movement in the inverse sense of the body. The fingers pressing upon the hypogastrium pushing its posterior face, and the distance that separates the two hands, indicates the thickness of the body of the organ and its true dimensions.

In case of deviation of the organ, it may happen that the uterus cannot be felt between the fingers of the right and left hand, which often seem to touch each other ; we then investigate some other point in the pelvic cavity ; this condition of affairs is most frequently found in the case of uterine flexion and notably in retroflexion, when the uterus is compressed between both hands, an elevating or lowering movement may be effected which will enable us to judge as to its partial or total mobility, either upwards, downwards or sideways. We are likewise able to determine by the sensations of pain developed in such movements the inflammatory alterations or reflex sensibility of the various portions of its suspensory ligaments.

By the same combined exploration, pressing always along the median line, we can learn the state of the bladder, and especially of the anterior and posterior cul-de-sac, note their condition and determine the presence of tumors. The vaginal finger perceiving the tumefaction which is held *in situ* by the left hand applied to the hypogastrium.

On the sides of the womb there are no organs to interfere, so the finger may be pushed along the lateral portions of the neck of uterus until it meets the fingers applied externally to the hypogastrium in such a way that the two hands feel each other; in a healthy condition of the uterus nothing will be be perceived.

If during this examination any foreign body is felt the surgeon should carefully investigate its nature, consistency, sensibility, and determine its seat and point of origin. Sometimes it may be a displacement of the uterus, sometimes a tumor of the large ligaments, and sometimes a disease of the fallopian tubes or ovaries. Ovarian lesions at their commencement can only be determined by bi-manual exploration, which not only reveals their existence, but enables us to establish their relation with neighboring organs, that which is of great importance viewed from an operative standpoint.

If we wish to make a detailed and complete examination, it is necessary to practice the vaginal touch with the right hand and hypogastric palpation with the left, in order to explore the median region and the right lateral half of the pelvis ; on the contrary, if we wish to explore the left lateral half and the ovary on the same side, we should practice the touch with the left hand while the right hand is engaged in exploring the abdominal wall.

In conclusion, bimanual exploration is absolutely necessary in order to diagnose diseases of the uterus, fallopian tubes, ovaries, large ligaments and the pelvian peritoneum, and it is difficult to learn anything unless we resort to this combined examination each time that we practice the vaginal touch.

III. Rectal Touch.—The rectal touch should only be practiced in case of absolute necessity when the vaginal touch has discovered a uterine displacement or a pelvian tumor, the characteristics of which are obscure. The best thing to do under such circumstances is immediately to proceed, without warning the woman, to make the rectal touch—as if it were only a necessary part of the examination. The finger slowly withdrawn from the vagina is pushed rapidly into the rectum. The patient is perhaps slightly astonished, but the little emotion created soon passes away, and the examination is completed before the woman has a chance to offer any opposition. (Gallard.)

The pulp of the finger is directed forwards and passes over the anterior wall, across which it easily explores the genital organs, all of which are situated in front of the rectum. Thus, after passing the sphincters and entering the rectum the finger encounters in front a hard, smooth, rounded tumor, which is the neck of the uterus, and passing on to the posterior face of this organ we are enabled to examine its slightest peculiarities and penetrate the pelvic cavity even higher than by the vaginal touch. The flexions or curvatures of the womb, tumors having their seat on its posterior wall or those occupying the cul-de-sac of Douglas, are most easily examined, especially if we combine with the rectal touch hypogastric palpation, in the manner heretofore indicated. By the rectal touch we can most easily examine the ovaries.

It has been proposed to substitute the rectal for the vaginal touch in *the case of virgins*, to the end of not shocking modesty and preserving the hymen intact. This substitution, advised notably by Lisfranc and Scanzonoi, has not been generally accepted by gynecologists.

Professor Simon, of Hiedelberg, has advised, in certain cases difficult to diagnose, the insertion in the rectum not only of one or two fingers but also the entire hand up to the wrist, a procedure originating in veterinary medicine, and which has caused death in several cases owing to the destruction of the walls of the intestine. The Simon's method should therefore be discarded.

Double Touch.—The vaginal and rectal touch may both be practiced at the same time—to the end of more closely examining the recto-vaginal septum, the retro-uterine cul-de-sac—and thus discover any tumors situated in these localities. For this purpose different processes may be used, to wit :

1st. The index finger of one hand is inserted in the vagina, while the index finger of the other hand is inserted in the rectum.

2nd. The thumb of one hand is inserted in the rectum, the index finger of the same hand in the vagina.

3rd. While the index finger is in the vagina, the middle finger of the same hand is introduced in the rectum.

Of these three procedures the last-named is the best, for it permits us to penetrate high up in both orifices and thus explore the whole extent of the recto-vaginal septum, the posterior face of the uterus up as high as the fundus, and finally the peritoneal cul-de-sac and the large ligaments. All these parts are elastic in their normal condition,and any sensation of resistance should awaken close attention, and lead us to infer that some morbid lesion exists, the seat and nature of which must be afterwards determined.

By the double touch we are also enabled to correct any errors of diagnosis so easily committed by those unaccustomed to practicing the rectal touch. The neck of the uterus, in fact, projects considerably into the intestine, and may be mistaken for a tumor of the septum or large ligaments, an error impossible to make when the double touch is practiced.

The touch being of all methods of gynecological exploration the most important and valuable, may in certain difficult cases be aided by various other useful aids, and combined with various other manipulations, and the question may arise of combining the rectal vaginal touch with hypogastric palpation, and the double touch.

We may also resort simultaneously to the rectal touch and catheterism of the bladder—when we suspect atrophy or absence of the uterus, inversion of that organ, etc. We are likewise able, in the presence of a uterine tumor, whose point of origin we wish to determine, to seize it with a strong pair of forceps and draw it downwards, and after placing the instrument in the hands of a skilled assistant to practice with one hand the rectal touch, while, with the other hand we apply hypogastric palpation. Other better combinations may still be imagined, and suggest themselves to the minds of the wise practitioner following his wants.—*Cincinnati Clinic and Lancet.*

THE CANADA MEDICAL RECORD

A Monthly Journal of Medicine and Surgery.

EDITORS :

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SUBSCRIPTION TWO DOLLARS PER ANNUM.

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All communications and Exchanges must be addressed to the Editors, Drawer 356, Post Office, Montreal.

MONTREAL, JANUARY, 1884.

COLLEGE OF PHYSICIANS AND SURGEONS, PROVINCE OF QUEBEC.

The detective officer of the College sends us the following details of his work, since the meeting of the Governors in September last :—

1st. The celebrated charlatan, Antoine Racicot, 220 St. Lawrence Main Street, Montreal, was prosecuted at the last term of the court; he confessed judgment, paid the fine and costs. 2nd. Another, by the name of Thomas Ward, residing at Notre Dame du Richelieu, County of Rouville, was prosecuted at the same term; he confessed judgment, paid fine and costs and promised to retire from practice. 3rd. Another, by the name of Jean Bte. Guay, residing at St. Gervais, county of Bellechasse, has been prosecuted; he confessed judgment and promised to stop. 4th. One of our well-known charlatans, named Isidore Provincal, residing at Windsor Mills, after being prosecuted, and seeing that he would not be allowed to continue practice, has removed to the United States.

DEATH OF DR. JOHN REDDY.

Many in Montreal were startled on the 23rd of January to learn that a cable dispatch has been received announcing the death on that day in Dublin of Dr. John Reddy of this city. Dr. Reddy had not for a year or two been feeling in vigorous health, but he still attended to his practice, one of the largest in Montreal, till last June, when he left for Europe. Since that time he has been travelling principally in Italy, and accounts received indicated that this much-needed rest was having the desired effect. Unaccountably, so far as we can learn, signs of great prostration set in, and his physician advised his return to his friends in Ireland, where he had just arrived when his death occurred. Dr. Reddy came to this city from Ireland about 1850 or 1851, and very shortly after received the appointment of House Surgeon to the Montreal General Hospital. This he relinquished in 1854, and very shortly after, a vacancy occurring on the attending staff, he was, after a severe contest, elected one of its members. He continued to fill this position up to the Spring of 1881, when he resigned, receiving the thanks of the Governors of the Hospital for his services. He was, for several years a representative fellow for the medical graduates on the Governing Board of McGill University. He was also an Ex-President of the Medico-Chirurgical Society of Montreal. Dr. Reddy took little or no part in the Medical politics of the city or Province, but devoted his entire energies to his practice, which was most extensive. As an accoucheur he had considerable of a reputation, and his practice in this special department exceeded, we believe, that of any other physician in Montreal. His manner was kindly, and there are thousands who will join with us in lamenting his death at the somewhat early age of 62 years.

MAKING ALLEGED FRAUDULENT DOCTORS.

A suit has been begun in the Supreme Court of the state of N.Y. by the Attorney-General against the Eclectic Medical College, of New York, to procure the annulment of its charter and the dissolution of the corporation. This college was organized under an act passed by the Legislature in 1865 and amended in 1869. The Attorney-General charges that the college has violated the provisions of its charter; that it has issued its diplomas in blank; that they have been exhibited and sold, and that persons purchasing them have had an opportunity to put their own names in the diplomas, and thereby persons utterly unqualified have procured the right to practise medicine.

The New York Post-Graduate Medical School has been so successful that on or about Feb. 1, 1884, it will move to a new building, which will enable it to give hospital advantages to its matriculates.

The new building is very large, being five stories high and having a front of 95 feet.

The new announcement gives a list of 140 physicians who were matriculates for the year ending Nov. 1, 1883.

THE INDEX MEDICUS.

This journal, published by F. Leypolot, of New York, is one which should receive support from all who take any interest in medical literature. Indeed, its discontinuance would be a calamity to the medical world. But to live it must have support, and heretofore that support has been so limited as to preclude its being continued at the price of $6.00 a year. The publisher has accordingly issued a circular, in which he asks old subscribers if they will be willing to continue if the subscription is either $10 or $12, as may be found necessary, from the extent of the subscription list. We predict that the major portion will continue, and thus place it on a satisfactory basis. It should be taken by, at least, every Medical School and Medical Society in the Dominion of Canada.

PERSONAL.

Dr. Clarence J. Chipman (M.D. McGill College has removed from Prescott to Ottawa.

Dr. Dion of St. Sauveur has been named Inspector of Anatomy for the District of Quebec.

Hon. Dr. Ross of St. Anne, one of the Governors of the College of Physicians and Surgeons for the District of Three Rivers, has succeeded Hon. Mr. Mousseau as Premier of the Province of Quebec. Dr. Ross is a man of much ability and combines in his nature all the good qualities possessed by the French and Scotch, from both of which nationalities he has descended.

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GYNÆCOLOGICAL REPORT—MONTHLY.

By E. H. TRENHOLME, M.D., B.C.L.,

Professor of Gynæcology Medical Faculty, University of Bishop's College.

DYSMENORRHŒA.

The fact that the majority of women suffer more or less from dysmenorrhœa makes it a subject of deep interest to the profession. In an able paper read before the Obstetrical Society of London, last year, Dr. John Williams points out that its most serious form is met with chiefly in the unmarried, which renders a complete investigation difficult. He divides dysmenorrhœa into two classes: primary and acquired. The latter are few, only about 1 to 40 of the former. Dr. W. thinks ovarian pain or inflammation rarely cause dysmenorrhœa, but rather consequences of it.

The doctor is not in favor of the mechanical theory of causation, as in his investigations he has found there was stricture of the canal, though the rarely round cervical ossæ were present. Imperfect development of the uterus was frequently found to exist, and accounts for the frequency of dysmenorrhœa among delicate ill-developed girls. The prospect of the paper favors constitutional rather than mechanical treatment.

The following are Dr. Williams' conclusions:

1. Dysmenorrhœa should be studied first under the least complex conditions—in single women.

2. Dysmenorrhœa in single women is rarely acquired; it is almost invariably primary, viz., it appears with the menstrual function.

3. Dysmenorrhœa in a few, but rare, cases spontaneously a few years after puberty.

4. Marriage, if sterile, aggravates the disorder in many cases; it is only very seldom that it relieves the pain.

5. Child-bearing cures a large number of cases, and it is not impossible that were all puerperal complications excluded it would cure every case.

6. The proportion of sterile to fertile women, subjects of primary dysmenorrhœa, is one to twelve.

7. Menstruation begins in women who become sufferers from primary dysmenorrhœa at about the estimated average age for the appearance of the function in London.

8. Menstruation is regular in about two-thirds of the cases; irregular in about one-third.

9. The menstrual fluid is profuse in about two-fifths of the cases, and scanty in about one-half. It contains clots or shreds in about three-fourths.

10. The changes which take place in the fluid in the course of dysmenorrhœa are various, and cannot at present be classified.

11. The uterus is imperfectly developed. It may be too short, or too small in volume, or it may be defective in both respects. The cervix may be conical, and the os small and round, but stricture of the canal in any part of its course is infinitely rare.

12. The changes in the uterus due to dysmenorrhœa are slight hypertrophy, erosion and eversion of the mucous membrane of the cervix, and catarrh. The cavity increases but little in length, for after

years of suffering it measures rarely more than two and a half inches in length. In the early stages the tissues of the uterus are in some cases soft; in the more advanced, hard.

13. The hypertrophy of the uterus is probably the result of periodically increased muscular action.

14. Ovaritis and perimetritis are possible consequences of dysmenorrhœa.

15. The menstrual pain is the result of spasm of the uterus, excited by the separation and expulsion of shreds of dreidna and clots, in an organ whose sensitiveness in the performance of its functions is enhanced by inappreciable conditions of tissue dependent on imperfect development, often associated with others, such as anæmia.

A NEW METHOD OF REMOVING NASAL POLYPUS.

By William Ralph Bell, C. M., M.D., New Edinburgh, Ont.

Not having seen any account or ever having heard that this method has been used by any person but myself, and believing that it originated with me, I take the liberty of bringing the mode of treatment before the notice of your readers, which I have practised with the very best results in several cases. It obviates any trouble from hemorrhage, which is frequently the case when the forceps or hook are used; it is painless and very simple. I get my patient to blow strongly through the affected nostril, closing the other with his finger. The polypus will be brought down so that it can be easily seen through the external nares; then with my hypodermic syringe charged with a solution of tannic acid in water (of the strength of twenty grains to the fluid drachm), I pierce the polypus with the needle, and injeet ten, fifteen or twenty minims of solution, according to size of tumor. In a few days the polypus shrivels and dries up (tanned); it comes away without any trouble or pain and looks like a clot of dried blood, my patients usually removing it by blowing the nose or by their fingers. In only one case, that of an old lady, had I occasion to remove it myself, and in her case I think she was afraid to do so, for when I seized it with dressing forceps I required to make no traction to bring it away.

New Edinburgh, Ont.,
February 19, 1884.

Society Proceedings.

MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

Stated Meeting, Jan. 11th, 1884.

T. A. Rodger, M.D., President, in the Chair.

Aneurism of Aorta–Rupture into left Bronchus.—Dr. Osler showed the specimen, which was taken from a man aged about 50, who was admitted to hospital with shortness of breath, due apparently to bronchitis and emphysema. Attention was not particularly drawn to his condition. After a residence of three or four days in hospital, profuse hæmorrhage took place from the lungs and proved rapidly fatal.

The autopsy revealed the large aneurism of the ascending arch here shown. It projected beneath the sternum, the manubrium of which was eroded. Firm laminæ of fibrin occupied four-fifths of the sac. From the posterior wall of the transverse part of the arch two smaller sacs projected, the size of large walnuts; one of these had perforated the left bronchus and induced the fatal hæmorrhage. The heart was not hypertrophied. Aortic valves healthy. Interior of aorta atheromatous.

Aortic, Mitral and Tricuspid Valve Disease.—The heart showed extreme button-hole contraction of the mitral orifice with great thickening and induration of the mitral segments, adhesion of the aortic semilunar curtains with sclerosis, and great narrowing of the orifice, and fusion and thickening of the tricuspid valves, so that the orifice barely admitted the thumb. There was considerable hypertrophy of all the chambers, particularly the right ventricle. The patient, a woman, aged about 35, was brought to hospital with general anasarca and extreme dyspnœa, and died in 48 hours. No satisfactory history could be obtained, as she was a stranger, but she had had several previous attacks of dropsy.

Non-valvular Dilatation and Hypertrophy of the Heart.—Dr. Ross gave the following short history of the case: This man, aged 48, had been under his care in the hospital for the past two years on and off, suffering from anasarca and at times with fluid in the pleura. He had a soft blowing mitral regurgitant murmur from his first admission; later on hypertrophy became evident, digitalis always relieved him. Two months ago he returned to the hospital and went through the usual stages of

advanced mitral disease. He never had rheumatism or any of the usual causes of heart disease, excepting that he was very intemperate.

Autopsy by Dr. Osler.—A couple of quarts of serum in peritoneum, two or three pints in each pleura, and several ounces in the pericardium. Heart hypertrophied and dilated; thick yellow clots in right chambers. Weight of organ, 610 grammes. Valves normal; aortic segments competent; mitral segments a trifle thickened at edges; no vegetations. Mitral orifice over six inches in circumference; tricuspid orifice nearly seven. The chambers were much dilated, and there was moderate hypertrophy of the walls. Muscle of fair color. Apices of papillary muscles fibroid. Aorta smooth. Coronary arteries not atheromatous. Lungs showed moderate emphysema at anterior margins; general brown induration; a large infarct at base of right lung. No pleural adhesions. Cyanotic induration of spleen, which was double the normal size. Kidneys slightly enlarged, coarse and hard; three healing infarcts in the left. Catarrh of stomach and bowels. Liver undersized, a little granular in the surface, hard and firm, and in early stages of cirrhosis.

Dr. Osler remarked that this was the fifth or sixth case of the so-called idiopathic hypertrophy and dilatation of the heart which he had dissected. The question of ætiology was interesting and not yet settled. Most of these cases are in large powerfully built men, accustomed to heavy muscular exertion, and Abbott, Myers, Leitz and others have regarded this as the chief factor. The condition of irritable heart described by Dacosta in young recruits may be supposed to be the initial stage of the process, although in the majority of instances the condition is transient. One point in connection with the ætiology must not be lost sight of, viz.; that in the great proportion of these cases the patients were hard drinkers, and how much the alcohol has had to do with the production of the disease is hard to say.

Dr. Trenholme asked if the condition of his liver would throw light on the primary cause. Dr. Osler, in reply, said he thought not, as it was not much diseased.

Dr. Kennedy said he knew of two somewhat similar cases. One was that of an athlete who has a mitral murmur, and whom he believes will develop, later on, symptoms like those just related by Dr. Ross. The second case was a young man who had sent for him, as he was suffering from weakness and sickness of the stomach. On examination, a soft mitral murmur was discovered. This young fellow, the day before, had gone for a very long snow-shoe tramp. Dr. Kennedy said we might expect to see similar cases more frequently, as snow-shoeing was becoming so fashionable.

Dr. Douglas, V. C. ex Brigade Surgeon, had seen many cases of irritable heart in the army, but they never led to a postmortem, as they would always be invalided. He said that Dr. Myers attributed heart trouble in soldiers to the pressure of the hook of the tunic on the vessels of the neck, increasing the labor of the heart, and producing palpitation.

Dr. Campbell said that cabmen, who at times have such heavy lifts, are prone to heart irritation. He knew of one well marked case. Has seen two or three cases in young men who, from over exertion at playing lacrosse, suffered from symptoms similar to those in Dr. Kennedy's cases. He (Dr. Campbell) had lately been examining a lot of young men about to enlist, and noticed that most of them came from occupations requiring very little muscle or heart work, as shoe and cigar makers and could understand that this class would on becoming soldiers be likely to suffer from heart trouble.

Dr. Buller called attention to Dr. Richardson's experiments with men working with and without alcohol. Whilst abstaining they did a certain amount of work with ease; the same men, allowed alcohol and doing the same work, suffered from palpitation and shortness of breath.

Pneumo-enteritis of the Hog.—Dr. Osler showed the colon from a case of this disease, known better by the names of hog cholera and pig-typhoid. A local outbreak in Hochelaga a few weeks ago furnished an opportunity of getting some interesting specimens. The disease is highly contagious, and the ravages in the United States probably exceed that of any other animal plague. The lesions are in the lungs and bowels—most commonly the latter, but the former may alone be involved. The specimen exhibited was a very typical example of the disease in the colon, the mucous membrane of which was converted into a thick greyish-yellow substance, owing to a sort of diphtheritic infiltration.

Dr. Alloway exhibited a *Fleshmole Placenta*, in the amniotic sac of which he found a small embryo (exhibited) mummified, which appeared to have been blighted at about the fifth or sixth

week. The mole itself represented a mass about the size of a normal placenta at the fifth month. It had undergone fatty degeneration; its amniotic sac was filled with a dark-colored blood-clot, and contained the above-mentioned embryo. The history of the case was as follows: The patient, a young woman in her third pregnancy, had menstruated last in January, 1883. In March (two months afterwards), she received a severe fright, and had a slight flow of blood. From this occurrence she had no more discharge until the expulsion of a mole on 13th December following. During the months of February, March and April she had all the early symptoms of pregnancy; had noticed considerable increase in size, which continued until about June or July. She remained stationary in this respect for a short time, and towards the latter part she noticed herself reducing in size and the vagina giving exit to a muddy-brownish discharge (non-offensive). Dr. Alloway alluded to the interesting way in which these moles occur, and gave Scanzoni's views as follows: "The ovum remains with the dead fœtus for a considerable time in the uterine cavity; the coagulum (utero-decidual) undergoes certain changes, and so gives rise to the formation known as a *fleshmole*. The effused blood (utero-decidual) becomes decolorized by rupture of the blood corpuscles and absorption of their coloring matter. The fibrin, Scanzoni supposes, becomes cellular tissue, and in this way is established a communication between the ovum and the uterine wall, which renders further development possible. The chief seat of this carneous degeneration is the decidua-vera. The amnion undergoes little change, and may be found adhering to the inner surface of the chorion, containing within its cavity a quantity of bloody fluid, and in which will be found what remains of the embryo." Dr. Alloway said his specimen corresponded to the description of a mole as given by Scanzoni; that he was sure the patient had become pregnant in, or before, March (nine months ago), and that the embryo had been retained in the amniotic sac in its mummified condition during that period. Dr. A. was also of opinion that many such cases occurred, but the embryo, not having been looked for, escaped in the discharge, and was thought to have been absorbed.

Dr. Geo. Ross said he had failed many times to find the embryo in an early abortion, and had no doubt but they are often dissolved in utero.

Dr. Kennedy said that if there was any separation from the uterine wall then the embryo was rapidly dissolved. Had a case where the embryo was perfect; left it in the amniotic sac over night, but by the morning it was entirely dissolved. He (Dr. K.) did not believe that Dr. Alloway's embryo had been in the uterus very long, certainly not anything like what Dr. A. seem to think. She might possibly have had one or more miscarriages early, but from the size of this specimen did not believe it was more than five or six weeks old. The relatively large size of the placental mass was due to its continuing to grow after the death of the fœtus.

Dr. Trenholme agreed with Drs. Ross and Kennedy.

Dr. Alloway, in reply, said he gave the Society the exact facts of the case, and wished the members to form their own opinion regarding the possibility of the embryo and membranous mass exhibited having been in the uterus for the length of time mentioned. In defence of the mass being what is known as a true mole, he gave Scanzoni's definition, which corresponded to his specimen. In reference to the black clot found in the amniotic sac, it must have been recent, otherwise it would have undergone the changes explained by Scanzoni and which take place in extravasations in other parts of the body.

Dr. Alloway also exhibited a *small piece of decidua* (about one inch square), showing, on the inner side of it, a distinct lining of amnion. The history of the case from which he had removed the specimen with the dull curette was as follows:— Patient, a woman about 40 years of age, mother of 12 children, had been losing blood from the vagina for several days; had been taking medicine from a physician, and had had her vaginal passage plugged daily to arrest hemorrhage. She was found by Dr. A. in a dying condition; no pulse at wrist, surface completely blanched, and extremities cold. Could not obtain an answer to questions. Heart's action could be heard very faintly through chest walls. She had received the last rites of the church, and was, in fact, dying. Removed all the cloths and packing in vagina; felt a fringe-like substance high up above the internal os, but could not reach further with finger. Passed up curette and detached the piece of decidua, and withdrew it with forceps. Washed out parts with antiseptic solution. Patient could not swallow. Administered hypodermic of ether. Ordered

beef-tea, egg and brandy rectal injection every two hours; heat to extremities and body generally. Patient improved by the morning, and gradually recovered life, but remains bloodless as when first seen, three weeks ago. Dr. Alloway said he adduced the case to show the great danger of following out rigidly the expectant plan of treatment in such cases. Efforts had evidently been made to remove the secundines with the finger, leaving behind the small portion exhibited, which was causing the hemorrhage. Those who opposed the curette were physicians who had never used the instrument, and had not convinced themselves of its perfect harmlessness and great value.

Dr. TRENHOLME said that a small piece of alum pushed into the os was what he found most useful for flooding in abortions.

Dr. KENNEDY believed that interference was seldom needed; that where the ovum was not entirely separated, it was best to plug and give ergot. Had several times known flooding to have been produced by meddling.

Dr. RODGER remarked that the physician first in charge of Dr. Alloway's case could not have plugged her properly, else she would not have been so low; believed the alum egg to be the most useful plug in such cases.

Elephantiasis of the Labia Minora and Clitoris —Operation—Death from Pyæmia three weeks later.—Dr. GARDNER exhibited the specimen and gave the following particulars:—The patient, aged 45, came from the country with a history of syphilis for 13 or 14 years. Besides the above tumor, which was attached principally to the base of the clitoris, there was present stricture of the rectum and a recto-vaginal fistula. The orifice of the urethra was so large as to easily admit the finger into the bladder. Dr. G. amputated the tumor with a scalpel, dressing the wound with iodoform. The temperature rose next day and pyæmia developed; there was swelling and effusion into several of the joints, suppuration taking place in two of them. The pyæmia was caused probably by embolism of the veins of the part operated on, the fœtid ulcerations around supplying the septic matters. A post-mortem showed extensive ulceration of the rectum with a stricture only admitting a goose quill. A pus cavity was found in the left broad ligament, but there was no visceral suppuration. The tumor was about 4 or 5 inches long and nodulated.

Dr. KENNEDY remarked that the operation was undoubtedly called for, but the result was unfortunate.

Dr. ALLOWAY said he had a patient with a similar tumor which now measures 7 inches in length. It does not cause much trouble, being covered with good skin and kept wrapped in a napkin. It began when the lady was 10 years old and has been gradually increasing.

Progress of Science.

THE ANTIPYRETIC TREATMENT OF TYPHOID FEVER.

By G. C. SMYTHE, A.M., M.D.,
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Under the rules of your Society, limiting each paper to twenty-five minutes, it will be impossible to discuss the subject of typhoid fever in its entirety, consequently I shall confine my remarks exclusively to its treatment, or rather to one particular plan of treatment, the antipyretic, discussing the pathology and symptomatology of the disease, so far only as may be necessary to furnish a rational basis for the plan which I propose to advocate.

Death may result in this disease from a variety of causes depending upon the nature and extent of the structural lesions which take place in any given case. These lesions are very properly divided into *primary* and *secondary*, the former including the local hyperæmia which occurs in the mucous membrane of the small intestine, together with the infiltration, softening and sloughing of the solitary and agminated glands with the subsequent ulceration.

These with some changes of minor importance, which take place in the mesenteric glands, spleen, etc., are the specific lesions of typhoid fever, and owe their origin to the direct effects of the poison, and are as necessary to the existence of a typical case as are the eruptions in the exanthemata or the specific lesions which occur in any of the infectious diseases. Death may take place from these structural changes. The necrobiotic processes in Peyer's patches may open blood-vessels sufficiently large to cause death from hemorrhage, or perforation may take place followed by a fatal peritonitis.

Only a small percentage of the mortality of this disease, however, can be charged to the specific lesions. Tabulating all the statistics to which I have had access, I find that less than six per cent. of the total number of cases have hemorrhage; of these a little less than one-third die, or less than two per cent. of the whole. About one per cent. of the totality of cases has perforation of the bowel, and a small portion of these recover, so that the entire mortality of this disease, arising from the specific lesions, is not far from three per cent.

It is plain, then, that we must look to the group of secondary lesions or those caused by the general disease for the cause of the heavy mortality in typhoid fever. These structural changes do not belong exclusively to this disease, but may occur in any disease *characterized by persistent elevation of tempererature* to which they undoubtedly owe their origin. They consist of congestions, inflammations and degenerations of important organs, and may include any organ or tissue in the body.

Death may result from the sudden arrest of function of some important organ or organs, as the heart, brain, or lungs, without the structural changes just mentioned, but be caused by the effect of elevation of temperature sufficient *to produce paralysis of these organs.*

Then we may have a fatal result occurring from three different sources in this disease.

1st. From the effect of the primary or specific lesions, ulcerations, hemorrhage and perforation.

2nd. Directly from the effects of hyperpyrexia producing paralysis of heart, lungs or brain.

3rd. Indirectly, by the pathological changes in important organs caused by the persistent elevation of temperature.

It is now a well established fact that the characteristic symptoms of typhoid fever such as low muttering delirium, picking at imaginary objects, sliding down in bed, subsultus tendinum, sordes, etc., are not the direct result of the specific poison of the disease, but rather the effect of the long continued elevation of temperature during which the structure and functions of important organs are effected by the heat, and the circulation *is poisoned by the detritus of rapidly oxydized tissue,* which accumulates more rapidly than it can be eliminated; this group of symptoms, known as the *typhoid condition,* occurs in all diseases which are characterized by persistent elevation of temperature, such as typhus, yellow, and scarlet fevers, small-pox, measles, and even malarial fevers, when they become continued; under any and all circumstances these symptoms owe their origin to continued hyperpyrexia.

The mortality of typhoid fever varies greatly in different epidemics and in different countries. It is exceedingly difficult to arrive at a satisfactory conclusion in regard to the exact death-rate. In the French Army from 1875 to 1880 inclusive, in 26,000 cases the death-rate was over 36 per cent. German statistics under the expectant plan of treatment which was used prior to 1862 gave a mortality of about 28 per cent.; the English and American death-rate is somewhat lower, but it will be safe to state, without wading through long columns of dry figures, that the percentage of deaths tabulated from the statistics of the entire civilized world would be somewhere between 25 and 30 per cent. Less than five per cent. of these deaths are shown to be caused by the specific lesions of the fever, and the remaining 20 or 25 per cent. of deaths are due to the secondary lesions, and are caused by the long continued pyretic condition present in the disease and *can and ought to be prevented by antipyretic treatment.*

The etiology of typhoid fever is imperfectly understood, but modern investigation, however, has a tendency to establish the truth of what has been discussed for ages as the germ theory, and the probabilities are that the causes of all the infectious diseases will be ultimately traced to low living vegetable organisms.

We possess no specifics for the disease in the same sense that quinia is a specific for malarial diseases or that salicylic acid and its salts are specifics for acute articular rheumatism; so we are compelled to adopt a symptomatic treatment, to combat unpleasant and dangerous symptoms and see that the patient does not die from complications, inter-current diseases or sequelæ.

These objects are best subserved by the cooling treatment. The temperature in this disease controls the situation. The danger is proportionate to its height and persistency, and although the hyperpyretic condition is never free from danger, however brief its duration (for death may take place in a few hours from paralysis of heart or brain), it is to its *persistency* that the danger in this disease owes its origin. A temperature of 103° or 104°, which is persistent for a period of three or four weeks will work more pathological

mischief than a temperature of 106° or 107°, which remits promptly, as in malarial and relapsing fevers.

Statistics show that with a purely expectant treatment, where the temperature did not reach 104°, in typhoid fever, the mortality was about 9 per cent.; where it passed 104°, but did not reach 105°, the mortality was about 29 per cent—when it passed 105° but did not reach 106° the death-rate exceeded 50 per cent.; and where it passed 107° recovery was rare. In all febrile diseases one of two factors is present and in a majority of cases both; they are, 1st, excessive heat production, and 2nd, faulty heat elimination. Antipyretic treatment consists in the administration of medicine to prevent this excessive production;—and the energetic application of cold water and other means to hasten its elimination by abstraction.

In order to accomplish the best possible results by this plan of treatment it must be *begun early and persisted in until the danger is passed.* This is a four weeks' fever. During the first week there is a gradual but persistent elevation of temperature, at the close of which, in a vast majority of cases, the maximum is reached; the temperature then is persistent with slight diurnal variations until the latter part of the third week or beginning of the fourth when the disease begins to decline, and the temperature is characterized by daily remissions of several degrees. If this period is reached without any serious complication or intercurrent disease arising from excessive heat, the patient ought to recover unless death takes place from the specific lesions of the disease, the manner of which has been already discussed.

In the application of cold water as a therapeutical agent, we are using a means of great power, and one that must be used with care or harm may follow. An agent that will lower the temperature in febrile conditions four or five degrees in ten or fifteen minutes, accomplishing this by actual abstraction of heat is not intended for the amusement of the patient and his friends, while nature cures the disease.

In applying all thermo-therapeutical remedies, we should be guided largely, if not solely, by the revelation of the clinical thermometer. This instrument was introduced into clinical medicine by Dr. Antonius de Haen, of Vienna, in 1754, but did not attract the attention it merited. Dr. James Currie of Liverpool again brought it into notice in 1797, but the profession, always slow to indorse great improvements and new discoveries, failed to recognize its importance until nearly three quarters of a century later. I regard the revival of clinical thermometry with its daily application at the bedside of more importance to the sick than any improvement of the 19th century.

Heat may be abstracted by affusion, immersion, the cold pack, sponging, or the use of Kibbee's cot. Affusion is the most effective, but is most unpleasant to the patient. This is Dr. Currie's method, as described in his work, published in England in 1797. He claimed that typhus fever could be aborted by this means, and that scarlet fever and small-pox were rendered mild and tractable affections. His method consisted in dashing upon the naked body of the patient five or six gallons of cold water, the temperature of which was, in some cases which he reports with full particulars, as low as 44° Fahr. This process was always followed by a rapid reduction of temperature sometimes reaching the normal. I have used the cold affusion in malarial and scarlet fevers with the same happy effect described by Dr. Currie. I have treated one case only of typhoid fever in this way of which I shall speak more fully presently.

I am convinced, however, after a somewhat extended trial of these different methods of abstraction, that what is known as the graduated bath of Von Ziemssen is most suitable for a majority of cases, and this is especially so for children and old people, because the shock of this bath is much less to the patient, and, if properly applied, the abstraction is none the less perfect. Fifteen or twenty gallons of water, a Knowlton's portable rubber bath-tub, a clinical and an ordinary thermometer, are all the implements necessary to administer these baths. The same water can be used if necessary for several immersions. The patient should be immersed at full length in the water, the temperature of which should be about ten degrees lower than that of his body, and after remaining two or three minutes, cold water should be added gradually until the temperature of the fluid in the tub is reduced to 70° or even 65° in obstinate cases. From fifteen to twenty minutes will be required to reduce the temperature of the patient to one hundred or below; while plunging him into cold water of 60°, according to the method of Liebermeister, will accomplish the reduction in ten or twelve minutes, but is much more unpleasant to the patient. The effect of a bath is to lower the pulse and respiration corres-

pondingly with the temperature, but its effect is only temporary. In two or three hours, less in severe and obstinate cases, the temperature will be as high as before and the bath must be repeated and the process *used must be continued as long and as often as the temperature approaches a dangerous point.*

This treatment should be inaugurated and superintended by the physician in person. If the baths are administered by inexperienced nurses more harm may be done than good accomplished, for the baths stimulate the heat-producing functions of the body, and unless the abstraction is thorough the good effect will in this way be counteracted. The nurses must be instructed thoroughly in the discharge of their duties. They must be taught how to take observations of the temperature with the clinical thermometer; in bad cases it should be used hourly and the result recorded for the information of the medical attendant. They must be taught how temper the bath and cool it down, which must be done by rapidly drawing off the water as it is warmed by the abstraction of the heat from the patient's body, and adding cold water. I have seen the temperature of the water in the bath-tub rise five or six degrees in less than that many minutes, so rapid is the abstraction. Nurses of ordinary intelligence will soon master the situation.

As soon as the diagnosis is well established, or before, if hyperpyrexia is an element of danger (for this treatment is appropriate for all diseases characterized by high temperature), this treatment should be begun. As soon as the temperature of the patient in the axilla reaches 103° F. a full length bath should be administered and repeated as often as the temperature reaches that point. It may require a dozen or more baths per day in obstinate cases during the first few days of the fever. This treatment, even thus early in any given case, has to a certain extent a prognostic value; for if, during the first week, we have a patient with an extremely high temperature which is controlled with difficulty we may confidently expect a severe case during the second and third weeks. Although these baths in most cases are agreeable to the patient they sometimes become irksome and distasteful long before the necessity for them ceases; fortunately we possess an article in that much abused drug, Sulph. Quinia, which *supplements the action of the water and obviates the necessity for such frequent repetition of it.* If given at the proper time and in sufficient quantity it not only produces a full and complete *remission*, but prolongs it until the following day is well advanced, even in the early stages of this disease, and renders the bath unnecessary during the latter period of the case. So far as our present knowledge extends the sulph. quinia is by far the most valuable article in the materia medica for lowering temperature in hyperpyretic conditions, yet it has no power to cut short the disease, at least in doses which can safely be used. But in order to accomplish a good result it must be administered with an unsparing hand and *at the proper time of day*, for little or no good will be accomplished by giving it in small portions scattered throughout the twenty-four hours. It is folly to give it in any quantity *in the morning* in order to prevent *the evening exacerbation*, for it cannot be done in this disease. The patient will suffer all the inconveniences of the remedy with no corresponding benefit. But, on the contrary, if it is given in one full dose of from 25 grs. to 50 grs. *in the early evening* it will strike the morning remission with the full force of the remedy, and the consequence will be that the temperature *will approach the normal closely*, and in the latter stages of the disease fall below with a cessation of all the dangerous symptoms which may have been present. This remission will continue from twelve to forty-eight hours, according to the obstinacy of the particular case or the period of disease at which it is administered, allowing time for the vital organs to cool off, thus preventing the congestions, inflammations and degenera tions of tissue which is undoubtedly the cause of the heavy mortality of this disease. Quinia given in this way does not produce the unpleasant effects so often seen to follow the administration of small doses continued for several days. It is the *tonic* and not the *sedative* dose which produces the unpleasant cinchonism. No harm has ever been known to result from its use in this way. Liebermeister has administered it over ten thousand times by this method, giving as much as forty-five grains at a single dose. Jurgensen gives seventy-seven grains as his maximum dose, and I have administered as much as seventy-two grains at a single portion. I have now administered this remedy in antipyretic doses about fifteen hundred times with no unpleasant effects, save a transient cinchonism, and when given in the evening the patient usually sleeps through this.

The changes produced in the appearance of a patient by this treatment are certainly remarkable. The disease is temporarily deprived of all those symptoms which we are accustomed to see in typhoid fever; and when the treatment is begun sufficiently early they fail to make their appearance. The low muttering delirium is gone, the hot dry skin, which we are accustomed to see is bathed in a profuse perspiration; the frequent and feeble pulse of 120 or 130 drops to 75 or 80 per minute, is full and soft; the tongue moistens with each remission, meteorism fails to appear, or rapidly subsides under the influence of the bath or the quinia. The latter seldom fails to move the bowels several times each day subsequent to its administration, and large quantities of fecal matter and flatus, which ought to be, are expelled, and the unabsorbed portion of the quinia thoroughly disinfects these discharges and contributes something towards preventing the spread of the disease.

Patients treated upon this plan *retain their consciousness* throughout the disease. They take an interest in surrounding events. They can describe all their subjective symptoms. They soon recognise the unpleasant effects of high temperature from their own sensations. They ask frequently for a repetition of the bath before the physician deems it advisable to use it. They beg for the administration of the quinia every day instead of each alternate day.

It will readily be seen what an immense advantage in the struggle for life a patient in this condition will have over his fellow whose intellect is muddled and rendered obtuse by the typhoid condition, and how much easier it is for the physician to detect and counteract the dangers of secondary lesions and intercurrent affections which are so fatal in this disease.

The application of the cold water simply abstracts the heat and does not interfere with the rapid oxidation of the tissues which produces the hyperpyrexia; the remission is of course much shorter than that produced by the quinia, which acts chemically and to a certain extent prevents oxidation, if only by its mere presence. Its power for good may be abused, and if continued too long become an element of danger. It lowers temperature by arresting molecular changes in the blood and tissues of the body, thus seriously interfering with the processes of nutrition and assimilation. The profound impression which it makes should not be continued too long nor repeated too often, for if continued from day to day it is not altogether free from danger. The full benefit to be derived from it is obtained by the remission which it produces—allowing the organism to cool off and thus preventing serious organic lesions; consequently it is not advisable to administer this medicine, as a rule, oftener than each alternate day, and frequently during the latter part of this disease it will not be required oftener than each third or fourth day with an occasional bath in the afternoon.

It is best to begin the administration of quinia with a 25 or 30 gr. dose. If this does not produce a satisfactory remission it should be increased until the maximum is reached for the particular case under treatment. This quantity, whatever it proves to be, can be materially reduced in the latter stages of the disease.

When this treatment is begun early, no other treatment is usually required. I am in a habit of presaging it with two or three cathartic doses of calomel; this is an efficient cathartic and clears the alimentary canal thoroughly of any accumulations of feculent matter—is a parasiticide and prevents the absorption of any further infections material from that source, and is supposed to exert a favorable influence upon the subsequent course of the disease. It should not be administered *after* the typhoid condition is thoroughly developed for reasons which are sufficiently obvious without any explanation. Occasionally a case will occur where the baths and quinia do not produce satisfactory remissions. In these cases the administration of the quinia should be preceded by digitalis or veratria for a period of twenty-four or thirty-six hours. I have met but two cases of this kind out of sixty-three, in both of which a full dose of 45 grs. quinia following the digitalis was entirely satisfactory. Neither digitalis nor veratria should be given in the latter stages of this disease, for whatever may be said of the action of digitalis as a heart tonic in other diseases, it is certainly not a safe remedy in the latter weeks of typhoid fever.

To Dr. James Currie, of Liverpool, is due the credit of first using cold water scientifically for the abstraction of heat in hyperpyretic conditions, To him is due the invention of the curved axillary thermometer, one of which has been preserved in the British Museum. His method was adopted largely throughout the British Isles and on the Continent, in the English army and navy. His

works were translated into French and German, and an edition was published in this country in Philadelphia. (Currie was a citizen of the colony of Virginia when the Revolutionary War broke out, but being loyal to the Crown he returned to England.) His rules for abstracting heat by water have been improved but little. Quinine had not been extracted from the bark in his day, yet he used the latter freely. The suddenness with which Currie's plan of treatment was abandoned after his death, which occurred in 1805, is one of the unexplained mysteries of medicine.

We are indebted to the Germans for reviving and establishing this plan of treatment on a sound philosophical basis. It is the most rational as well as the most successful treatment that has ever been adopted in this fever, as is clearly shown by statistics. At Basle, Switzerland, Liebermeister reduced the death rate from 28 per cent. to 8 per cent. At Kiel under antipyretic treatment a little more vigorously and systematically applied the mortality fell to 3.1 per cent.

The analysis of the statistics of the German Army are valuable and convincing. From 1820 to 1844 the death rate was a little over 25 per cent. From 1868 to 1874, under partial and imperfect antipyretic treatment, the rate per cent. of deaths was reduced to 15. From 1874 to 1880 the treatment was more general, and the death rate was reduced to 8 per cent. In the Second Army Corps the cold water treatment was more thoroughly tested. When this treatment was begun by Dr. Abel, who is a strenuous upholder of this plan, the mortality rated at 20 per cent., which, however, soon fell to less than 5 per cent. Still more striking is the confirmation afforded by the five principal hospitals of this corps which were under the immediate and personal supervision of Dr. Abel. In 1860 the mortality had been 25 per cent., by 1877 it was lowered to 7 per cent., and during the five years following the immediate coming of Dr. Abel it fell to 14 deaths in 764 cases, or 1.8 per cent.; these figures are taken from an article in the *Review Scientifique* from among many others all from official sources and all pointing to the same conclusion.

During an extensive epidemic which has recently prevailed in France this plan of treatment has been tried successfully in some localities, although the French, since the Franco-Prussian war, do not take kindly to German methods. In Paris the hospital physicians disagreed in regard to its utility upon theoretical grounds, and it was not used systematically, and consequently gives no statistics of value. In the city of Lyons it was vigorously used, with a reduction of the mortality rate to 2 per cent.

Our most favorable reports come, however, from private practice. Neither water-works nor bath-rooms are necessary to secure the best results from this plan of treatment. Indeed, the latter cannot be used, for patients cannot be transported from the sick chamber to the bath-room, even though it might be in an adjoining apartment. I have treated upon this plan sixty-three cases with two deaths. Dr. J. R. Featherstone, of Indianapolis, has treated fifty-seven cases with one death. Dr. W. H. Vanzant, of Carbon, Ind., has treated twenty-six cases with no deaths. Dr. S. E. Earp, of Indianapolis, has treated eleven cases with no deaths. This gives a total of (157) one hundred and fifty-seven cases with three deaths only, or a rate per cent. of mortality of 1.9.

The highest temperature reached by any of these cases was 107.75°. It occurred during the death agony after severe and repeated hemorrhages in a patient whose temperature previous to that time had not exceeded 104.5°. One patient recovered whose temperature about the middle of the second week touched 107.5°, another whose temperature reached 107° recovered. The temperature of sixteen of my cases went to 106° and beyond, some ranging as high as 107.5°—all of these recovered, a result hardly to be expected from any other plan of treatment.

Hemorrhage of the bowels occurred in nine cases, or a little less than six (5.7) per cent. It has been claimed that hemorrhages are more frequent under this plan of treatment. Exactly the converse is true. The inflammation is less in the ulcerated mucous membrane, the bowel is not stretched and distended, and its capillaries torn by tympanitis. This is one of the complications which belongs more properly to the latter stages of the disease. More patients live to the period of the disease at which it occurs, which accounts for the apparent increase in the number of cases suffering from this accident.

Of these one hundred and fifty-seven cases, eight relapsed, five and two-tenths per cent. of the whole. It is also claimed by the opponents of this plan that more relapses occur than when the expectant or do-nothing plan of treatment is

adopted. It would be strange, indeed, if this were not true, twenty additional lives are saved out of each hundred treated by this method as compared with the expectant treatment. So the relapses ought to be one-fifth greater, having that much more material out of which relapses are liable to occur, while the 20 per cent. of dead under the expectant treatment can furnish none.

Sixteen of Dr. Vanzant's cases were treated by affusion and ten by immersion. Three of the former relapsed. His largest dose of quinia was fifty grs.

Drs. Featherstone's and Earp's cases were treated by sponging, the cold pack, and an occasional bath. The largest dose of quinia administered by the former was sixty grs., the latter fifty grs. All the cases which I have treated since 1878 have been immersed, with the exception of my last case, which was treated by affusion. I find that the water and quinia supplement the action of each other. The intermission produced by the quinia after the use of the bath is much more satisfactory and prolonged, while the quinia renders the necessity for the bath much less frequent.

The case which I treated by affusion was a healthy male adult, aged 19. He was the last one of eight cases which made their appearance in a club of Asbury students. The attack promised to be unusally severe, the temperature ascending to 105° Far. on the afternoon of the fourth day. At 3 p.m. he was stripped and placed in a large tub in the erect position and about five gallons of water, the temperature of which was 75°, poured slowly over his body. Fifteen minutes afterwards his temperature was 99°. At 7 p.m. his temperature had risen to 105.5°, when the affusion was repeated with a similar result. Forty grains of quinia were administered at the same time. The patient perspired profusely through the night, slept well, and on the following morning at 8 a.m. temperature normal, pulse 76, respiration 20. This condition continued for about thirty-six hours, when the temperature gradually rose, but never exceeded 102 5° during the remainder of the disease. After this period of the disease had passed, 15 grs. of quinia produced a perfect remission, and no more water was used, but the duration of the fever was twenty-six days. Affusion should be used only during *the first few days* of the fever.

Patients treated upon this plan have few or no sequelæ, and are able to resume their occupations in a few days after convalescence is established.

Few conditions arise which contra-indicate its use: of course that perfect degree of rest necessary in hemorrhage and perforation forbids its employment in cases where these complications arise.

Greencastle, Ind., September. 1883.

ALOPECIA PREMATURA.

The *Edinburgh Medical Journal* reproduces from the *Berliner klinische Wochenshrift* (No. 16,1882), the following note: O. Lassar has continued his observations on the nature of premature baldness, and has further convinced himself of the communicability of at least the form associated with dandruff. When the hairs which fall off in such cases are collected, rubbed up with vaseline, and the ointment so made is rubbed among the fur of rabbits or white mice, baldness rapidly makes itself visible on the parts so treated. That this is not due to the vaseline was shown by anointing other animals with the vaseline alone, which produced no effect whatever. He considers that the disease is spread by hairdressers, who employ combs and brushes to their customers, one after another, without any regular cleansing to these articles after each time they are used. During frequent visits to the hairdresser's it can scarcely fail that brushes are used which have been shortly before dressing the hair of one affected with so common a complaint as scaly baldness. Females, he thinks, are less often affected with this form of baldness, because the hairdresser more frequently attends to them at their own homes, and there uses *their* combs and brushes. In order do prevent, as far as possible, the commencement of alopecia prematura, the hair should be cut and tressed at home and with one's own implements, and these thoroughly clean. When it has begun, the following mode of treatment is suggested: The scalp is to be daily well soaped with tar or fluid glycerine potash soap, which is to be rubbed in for fifteen minutes firmly. The head is then to be drenched with, first, warm water, and then gradually colder water. A two per cent. corrosive sublimate lotion is next to be pretty freely applied. The head is then to be dried, and the roots of the hair are to have a one half per cent. solution of naphthol in spirit rubbed into them. Finally, a pomade of one and a half to two per cent. of carbolic or salicylic oil is be used to the head. This treatment has now in many cases brought the disease not only to a stand, but the hair has been to a to considerable extent restored.

A CLINICAL LECTURE ON ANATOMICAL LESIONS OF THE FEMALE PERINEUM.

Delivered at the Long Island College Hospital,

By A. J. C. SKENE, M.D.,

Professor of Gynæcology; Visiting Physician to the Hospital.

GENTLEMEN: I desire to call your attention to the subject of lacerations of the female perineum, and the results which may occur if appropriate treatment be neglected for the restoration of its function.

The various degrees of this laceration are clearly stated in our modern text-books, consisting, as they do, of three degrees, viz.:

1. Superficial rupture of the fourchette and perineum, not involving the sphincters.
2. The rupture extending to the sphincter ani.
3. Rupture through the sphincter ani, which may involve the recto-vaginal septum.

There are some lesions, however, the final results of which have not been discussed in our literature at the present day, and to which I would specially direct your attention, while discussing the subject of perineal lacerations, in those cases who may present themselves at our clinic to-day.

The first to which I shall direct your attention is the separation of the perineal muscles at their junction in the median line, without an accompanying laceration of the vaginal mucous membrane or the integument of the perineum. The appearance of the parts, viewed externally, gives no evidence of the lesion, the distance from the posterior commissure to the anus being perfectly normal. On separating the labia, however, or on introducing the speculum, the posterior vaginal wall also appears to be uninjured, but, upon examination by the touch, the deeper structures of the perineal body are observed to be absent. In passing the finger into the vagina and making pressure backward and downward, the mucous membrane of the lower portion of the vagina can be brought directly in contact with the integument below.

A similar condition of things I have quite frequently observed in patients upon whom the operation of perineorrhaphy had been performed, with the result of obtaining union of the integument and mucous membrane without restoring the perineal body.

In this condition of separation of the deeper structures of the perineum, the effect is precisely the same as in those cases where the mucous membrane and integument have also been lacerated, as they ordinarily are. The sustaining and supporting power of the perineum is entirely lost. The integument and mucous membrane are relaxed, and hence permit eversion of the vaginal walls, and subsequently prolapsus of the uterus and bladder. In one case which I have seen—a lady of over sixty years of age—it appeared that a portion, at least, of the sphincter-ani muscle had been ruptured, at any rate, the patient had very imperfect control of the rectum, and still, on superficial examination, the perineum appeared to be complete, so far as skin and mucous membrane were concerned. I am inclined to think that what has been described by Matthews Duncan and others as functional imperfection of the perineum has really been this subcutaneous laceration of the central structures of the perineum.

Regarding the cause of this condition, I am inclined to believe that it is the same as that in ordinary lacerations—namely, parturition.

I accept this view of the causation because in all the cases I have seen there has been a precedent parturition. In these cases it would seem that the elasticity of the muscular structures was less than that of the integument and mucous membrane, so that, while the former gave way when put upon the stretch, the latter came out uninjured.

Regarding the treatment of this condition, I am not quite satisfied that anything of value can be done for it. If the case is recent and the perineal muscles have not become atrophied, then I believe it would be good practice to divide the integument and mucous membrane, and, if need be, removing the superabundant portions of these latter bring the deeper parts together—if possible, with sutures as in the ordinary operation for restoring the perineum. The second condition is more rare than the one just described, and consists in atrophy of the perineal muscles, including the levator-ani muscle.

A typical case of this affection came under my observation in 1879. She was forty-four years of age, married, and had had several children. She had prolapsus of the vaginal walls, and a slight prolapsus of the uterus. These conditions were quite apparent on superficial examination; but a more careful study of the case revealed the following: The distance from the posterior commissure of the vulva to the anus was normal; but, upon grasping the perineum, with the index finger in the vagina and the thumb upon the outer surface, no intervening muscular tissue could be detected. The posterior vaginal wall could be brought in direct contact with the integument. On the most careful digital examination by the vagina, I failed to detect any evidence of muscular tissue. Running from the centre below to the left sacro-iliac junction, the rectum could be distinctly felt firmly contracted, feeling through the vaginal wall like a cord the thickness of the finger.

This was demonstrated by passing a catheter into the rectum, showing that there was firm contraction of its muscular walls, and yet its dilatability remained normal, as evidenced by the fact that the bowels moved easily and freely. Although there was a marked prolapsus of the posterior vaginal wall there was not the slightest rectocele, when the patient assumed the erect position, the anus and perineum bulged downward; this was also ap-

parent when the patient was in Sims's position, with the knees drawn up. The anus projected downward until it came nearly on a line with the lower portion of the nates. In fact, the descent of the remains of the perineum and anus presented an appearance not unlike that which is observed during labor, when the fœtal head begins to push these parts downward. It was clearly evident to me that all the muscles which form the floor of the pelvis had become entirely atrophied. This view was confirmed by the fact that all my efforts to restore the tonicity of the parts failed, and the only relief afforded was by the use of a perineal pad. In seeking for the cause of this condition I have been unable to find any thing definite. It is just possible that this patient suffered a subcutaneous separation of the perineal muscles during one of her confinements, and that long disuse of the muscles after this separation caused fatty degeneration. This is a rational explanation of the atrophy of the perineal muscles but not of that of the levator ani.

Perhaps the levator-ani muscle was congenitally defective, or, again, it may be that the separation of the other perineal muscles imposed an unusual strain on the levator ani, which caused it to become atrophied. All this, however, is speculation in relation to the genesis of these peculiar affections of the female perineum. The point of most importance at present is to know that such injuries to the perineum do occur.

In regard to the treatment of those cases, it is clearly evident to my mind that the only possible way of repairing the damage is to operate as soon after the injury as involution will allow. Because the longer the separated muscles are functionally inactive, the more certainly will they under go degeneration and become permanently useless.

There is still another important fact connected with injuries to the perineum to which I have already called attention—namely, the atrophy of the muscles which takes place in laceration of long standing.

In such cases perineorrhaphy, as ordinarily done, gives very poor results. Good union of skin and mucous membrane may be obtained, so that the operation may appear to be a success, but the wasted muscles can no longer perform their function and the operation is practically a failure. Integument, mucous membrane, adipose and areolar tissue do not constitute a perineum capable of supporting the pelvic viscera.

Case I.—Laceration of the perineum in the first degree. Patient under ether.

The patient now before you came into the hospital last night suffering from simple laceration of the perineum of the first degree, involving the sphincter vaginæ and part of the perineal body. This condition is very deceptive, looking as though there was more perineum than there really is. The amount of the perineal body is, however, readily shown by passing a sound into the rectum and measuring the perineum above; you can here distinctly estimate the extent of the laceration.

I will now show you the several steps in the operation, the first being to vivify the tissues. This we do with the scissors, with which you can make the parts to be united perfectly smooth. But to do so you must have the central portion put upon the stretch by the aid of your assistants.

By adopting this means you can trim your surfaces and edges perfectly straight.

You will observe that my first suture I insert at the anal portion of the laceration, passing each subsequent suture upward until I have now applied three sutures. The fourth suture I specially call your attention to, and its manner of insertion. I first enter it through the integument upon one side then carefully carry it through the lateral half of the body of the perineum, and then sweep the needle round through the central portion until I reach the extreme limit of the vivified tissues high up in the vagina. By this means I completely close the upper portion of the wound and leave no room for the vaginal secretions to enter. You have also noticed that during all this time my assistant has carefully sponged away all blood oozing from the parts, to let me see what I was doing, and also to insure, as far as practicable, a union by first intention by leaving the parts clean. I have also inserted a fifth suture, simply passing through the segumentary borders of the wound in order to still further guard against secretions entering the wound.

The ligatures having now all been tightened the patient will be placed in the ward, and the bowels kept gently open, in order to prevent any strain upon the parts until they unite. The laceration is not a great one, and only calls for surgical treatment to prevent a prolapsus of the vaginal walls which was being developed. This is the simplest form of laceration, and hence the operation for its restoration is easy and simple. The time required to operate was only twenty minutes, and yet you observed that no undue haste was made. (Patient presented to the class two weeks after, and the result proved to be good.)

Case II.—This case is one of Dr. Stewart's, and I will therefore request him to give you a brief history of her case.

History as given by Dr. Stewart.—This patient was confined in the hospital, and sustained a laceration of the perineum extending into the rectum. I performed the immediate operation, putting in five or six sutures. The operation promised very well, but at the end of four or five days there commenced a purulent discharge; injections were carefully used, and all the procedures in such cases were gone through with, but without arresting the discharge entirely. We recognized that we had at least partial union when we removed the stitches. This woman is brought here to-day to show how, even under most unfavorable circumstances, we may get union by primary operation for restoration of the perineum.

In this case there really is more perineum than is apparent. In fact, we find a tolerably good perineum, which result is quite remarkable under

the circumstances, to say the least of it. The doctor has obtained as good a result as was seen in the case which I showed you—the one that was operated upon years after the injury. I have, however, perhaps a little more perineum in my case. I do not believe that either of us obtained perfect union of the ends of the sphincter muscles, but we secured the next best thing—union through the medium of considerable scar tissue, so that the sphincter can perform its function by contracting toward the perineum as the fixed point. So you see that the anus is drawn forward because of this fixed point of scar tissue; she, however, has perfect control of the rectum. This is proved by the testimony of the patient and the fact that, as I introduce my finger into the anus, the muscle contracts toward the fixed point firmly enough for all practical purposes, and the patient will be able to get along well enough.

These cases are called perfect results; they are, perhaps, good enough, and we are glad to get them, but yet they are not the most perfect results attainable. This case gives us the opportunity to call attention to the importance of the primary operation, as it is called, in laceration of the perineum. There has been some discussion about that of late years, some claiming that, if you simply bring the parts together without sutures, you may secure union, and that you are not more likely to obtain it if you introduce sutures; for this reason some have advocated this mode of treatment. Others, again, and I think that the great majority of gynæcologists of the present day, favor the primary operation. By that I mean the immediate operation, which is performed as soon as you have removed the placenta, and the uterus has contracted. Do not leave your case and go home, and then return the next day to perform the operation, because then the parts are not in a condition to unite by first intention; if you disturb them by manipulation, you then, also, utterly spoil the possibility of union without sutures. If you are careful to remove all bloodclots and bring the parts together, and bandaging the limbs to secure perfect rest, you may get union if there is not much subsequent hæmorrhage. Union has frequently occurred under those circumstances. So, if you propose to trust to nature, you had better adopt this plan; but do not change your mind and use sutures the following day, because that would almost insure failure.

I am a great advocate for the primary operation, and in all cases of any importance I believe that it is always well to introduce sutures, if you do it properly, putting in your stitches just tight enough to keep the parts in apposition.

I remember a case which made a profound impression upon me. I was sent for by a medical gentleman in the case of a primipara, and, on examination, I found a breech presention, with the os partially dilated. I suggested that he might wait a while. The patient had a masculine pelvis, and I thought it would be advisable to secure perfect dilatation before attempting delivery. I heard no more of the case until the following morning at about the same hour, when her physician again sent for me. I then found, upon examination, the os fully dilated, the labia œdematous, and the nates of the child presenting at the vulva, and extremely dark in color. The physician told me that the os dilated soon after I left on the day previous, the breech at once settling down in the pelvis, where it remained. We proceeded at once to remove the child, and succeeded in extracting the feet and bringing down one arm, and, while I was bringing down the other arm, the doctor wispered to me that they were very anxious for the life of the child. At this moment the little fellow moved one of his feet, much to my surprise. I then extracted rapidly, and succeeded in obtaining a living child. I, however, tore the perineum through to the rectum, the parts being in that extremely œdematous condition they had lost their elasticity.

This patient began the process of parturition late in life, and this long-continued pressure (in all three days) rendered the parts so œdematous that they gave way, and I made the biggest perineal laceration I have ever made in my life. I immediately brought the parts together with sutures, though I had very little hopes of their union in such a condition, as they were so enormously swollen. However, we brought them together, and I heard no more of the patient for twenty-four hours, when I was again sent for by her physician, he informing me that he had failed to pass the catheter. I separated the labia, and found a dark, sloughing mass, which rendered it quite difficult to tell where the meatus was. I however, made gentle pressure at the point where I supposed it should be, and, without further difficulty, passed the catheter and evacuated the bladder. The doctor pased the catheter once or twice afterward, when all at once the patient urinated of her own accord, he thinking it was all right; but, upon a careful examination, it was discovered she had a vesicle fistula.

I saw her a week after, when the labia and thighs were covered with an ill-conditioned-looking diphtheritic exudate. It was a horrible condition to be in, the lochial discharge flowing over these surfaces, and the urine dribbling away. She, however, recovered from this, and you will hardly believe me when I tell you that the vesicle fistula closed of its own accord—a thing which does sometimes occur. When we removed the stitches from the perineum, it was found that she had a perfectly good perineum and a good sphincter; I have never yet seen a better.

The case made a profound impression upon me, for, if we can get union occasionally in such cases, we can have good hope for success in simpler ones. I would say, always perform the primary operation when the condition of the patient will permit, for, if you do not get union, you can operate subsequently. If you get just a little union, it is some

gain. There is really every argument in support of the immediate operation. You have everything to gain and nothing to lose.

The child in this case was a splendid-looking little fellow after the ecchymosis disappeared; but, after all our trouble in the case, he did not survive.

His bowels positively refused to act. Upon an examination being made, it was discovered that the colon was nothing but an impervious cord.

Case III.—You doubtless remember the patient whose perineum I endeavored to restore a week since; she had suffered long from marked constipation. I at that time stated that I should order the bowels to be moved freely each day after the used operation, and adopting the new order of treatment, to which I call your attention—viz., to keep the bowels free in place of confining them, as we used to do after restoring the perineum. The day following the operation a full dose of Rochelle salts was administered, and the following morning it was repeated; when it was time for this to have acted, an enema of ox-gall with soap and water was given. On the following day castor-oil was given, followed by another enema of ox-gall with oil; this, however, failed to secure the results anticipated, and was therefore abandoned, and the following prescription substituted: One ounce of senna leaves put into a quart of water and boiled down to a pint, then adding an ounce of Rochelle salts; two ounces of this preparation was given to the patient every thirty minutes; in all, five doses were given, which secured copious and easy evacuations; and this morning it was repeated with a like effect.

I mention this case to show you how extremely difficult it is at times to move the bowels in women who are habitually constipated. This patient's bowels were moved usually but once in too or three weeks. This seems incredible, and for a long time I used to doubt this when told so by the patient, if she retained a fair degree of health; I, however, fully believe it now, having seen many patients like this one. I am indebted to Dr. Palmer for the prescription last used in this case. I was telling him of my difficulty in some of these obstinate cases, and he informed me he had encountered the like difficulty, and had found that this preparation answered admirably. I therefore adopted it in this case, and effected the most satisfactory results. The movement of the bowels has done no harm, so far as we know, to the perineum, although the laceration involved the sphincter ani. I always feel a sense of safety when the bowels move without causing any bleeding, for, if the newly-formed tissues were separated, it would occasion more or less hæmorrhage. What the final result may be here I do not know. I, however, feel quite confident of securing a good result.

This case fully illustrates how we may be disappointed in the action of our cathartics, although the patient here had taken sufficient to move a whole company of soldiers, but upon her it produced no effect.

Hæmorrhage in these operations is often a source of difficulty and delay to the operator, but, worse than that, it is sometimes the cause of failure. In the vast majority of surgical operations, all that is required of the surgeon is to arrest the hæmorrhage in order to secure a good result; but, in the operations in question, if styptics have to be used, the operation fails. Cases differ so very much in regard to hæmorrhage that I have given much thought as to the predisposing causes of this bleeding tendency, so marked in some patients. The hæmorrhagic diathesis in its most typical form is generally found in men, but a less marked hæmorrhagic tendency is common to many women, who are very unpleasant subjects to operate upon. During the past few years it has been my misfortune to meet quite a number of cases in which the bleeding tendency was noticeable. The cause of this in most of them, I think, was due to impaired general health, due to exhausting conditions of life rather than to any congenital imperfection of the blood itself. Another very important element I found to be mechanical interruption of the circulation, the pelvic organs becoming congested from retardation of the portal circulation, induced by hepatic disorders, sedentary habits, tight lacing, and so forth. The products of former pelvic inflammations, such as pelvic cellulitis, also tend to maintain a hyperæmic state of the pelvic organs; this we often find long after all evidence of active inflammation has subsided.

The condition, also, of the uterus and perineum is often favorable for bleeding; the well-defined vascularity which exists in conditions such as imperfect involution insures hæmorrhage in all operations undertaken during such unfavorable states. The possible hæmorrhage from such causes can be avoided by the proper selection and preparation of your cases before operating. This fact is well known to all gynæcologists, but I mention it now because others less familiar with the diseases of woman are liable to neglect this very important matter. I know this to be true from having patients sent into hospitals for operations which they are not at all prepared to undergo. It also happens occasionally that I am called to operate in private practice at a time when I can only suggest a course of preparatory treatment.

The rule which should be followed in this matter is to secure the best possible state of the general health of the patient, and to reduce all hyperæmic states of pelvic organs as far as possible. This is generally possible to a great extent, because the object of plastic operations is to restore the organs to their original form and structure, differing in this regard from many other operations in surgery which have for their object the removal of diseased parts.

In carrying out this plan of treatment, however, there is one difficulty encountered in pratice: when the patients are ill and suffering, they will gladly accept an operation which promises them relief, but, when they are relieved from pain and have

gained in health, they hesitate about undergoing any surgical treatment which is designed to keep them from suffering in the future. This, however, does not persuade the surgeon from doing otherwise than that which is best. There are cases—fortunately very few—who have the hæmorrhagic diathesis sufficiently marked to debar them from operations, and it is doubtful if any preparatory treatment will change this constitutional peculiarity. Such subjects should be let alone: to operate in these cases is dangerous, and almost always ends in failure. I have had three such cases in the past five years; two of them were operated upon before discovering their peculiarity, the results being depletion of the patients without any benefit from the operation, and the development of extreme caution on the part of the operator in selecting cases in future. The third case was diagnosticated earlier, and I declined to operate.

These few remarks regarding the predisposition to hæmorrhage, and the best means of overcoming the same, bring me to the point of my subject, and to which I desire to call your special attention—viz., the management of bleeding in plastic operations upon the perineum and cervix uteri.

In restoring the perineum, the mucous membrane only should be removed; if the deeper structures are wounded, the hæmorrhage will be much greater. All scar tissue must also be removed; but, if care is taken to separate it from the normal tissue large vessels may be avoided. By observing these rules, troublesome hæmorrhage from the lower portion of the denuded surfaces will be avoided. Occasionally, in deep lacerations, a small artery on each side may require to be ligated; the chief arterial bleeding, however, comes from the upper portion, the small vessels coming apparently from above downward in the areolar tissue, between the rectum and vagina. These sometimes bleed quite freely, and they are not arrested by tightening the sutures which control the hæmorrhage at points lower down. Such vessels I control by passing a needle through the vaginal mucous membrane above the denuded surfaces, and thus carry a ligature under the bleeding vessels, tying it over the free surface, and by this means controlling the bleeding on the principle of acupressure.

These sutures can be left in position until the perineum has completely healed; they can then be removed with the aid of the speculum. Occasonally it becomes necessary to ligate some of these vessels which bleed persistently and can not be controlled in the way I have previously described; it is then well to ligate them with a fine catgut ligature, the ends being cut off short and inclosed in the wound.

In spite, however, of all precautions, you will occasionally have secondary hæmorrhage after this operation. I have met with four such cases in my practice; in one of them it occurred on the seventh day after the operation. In all of them the bleeding took place from the upper or vaginal portion of the wound, the blood flowing and widely distending the vagina before appearing externally.

In my first case I was obliged to remove the sutures, empty the vagina of blood-clots, and ligate the bleeding vessels. This resulted in spoiling my operation, although I re-introduced the sutures; union in this case did not take place. This hæmorrhage occurred on the second day.

In my three subsequent cases I secured much better results. Introducing a Sims's speculum on the *anterior* side of the vagina, I removed the clots and blood by sponging; and then throwing light into the vagina by means of a concave reflector, I was able to see that the blood welled up from the upper portion of the wound. In place of pulling the edges of the wound apart and searching for the bleeding vessels, I passed a curved needle and ligature down and around the place where the bleeding came from, and was able, by tightening my ligature moderately, to control the bleeding entirely, these cases subsequently doing well, the result of the operation being good.

This is a practical point well worth remembering, as it will enable you to meet this accident and treat it successfully should it occur to you.

Case IV.—This patient now before you is one who some time since presented herself suffering from a laceration of the perineum, and upon whom I operated before you at that time. The patient comes here to-day for me to remove a suture. I remembered, after she had left the hospital, that I had left in the suture which I had applied to arrest hæmorrhage. In place of picking up the artery, I passed a needle down through the vaginal wall, bringing it out below and then ligating. I removed all my sutures afterward, but forgot this one, which I had put in to arrest the hæmorrhage; it was doing no harm, and did not interfere with the healing of the wound at all, because it was away above. This is a typical case, demonstrating the principle of which I have just spoken, showing that you can arrest the bleeding in these cases without ligating the bleeding vessel in the womb.

This suture has been in the tissues since the 15th of February; the portion which has been in the tissues is just as clean as a silver wire, but that portion in the vagina has become discolored and soiled by the menstrual flow. Now this, with many other cases, has satisfied me that you can prepare the silk ligature and make it aseptic. I have in my possession a piece of silk ligature which I left in the cervix uteri for more than a year.

The woman became pregnant. Soon after, I restored the cervix, and she came to me six weeks after her confinement, and I then found one of my sutures; the length of time which it had remained in the tissues was one year, two months, and twenty days; this was several years ago, and the suture is good yet. This shows that you can submit the silk to any test, and it will do less damage than the silver wire. Had I used the silver wire in that case and allowed it to remain, the

patient would probably have returned to me long before.

Case V.—This woman has borne three children, the youngest being between three and four months old, and weighing at the time of birth fifteen pounds.

Now, here you will observe, as a result of this enormous distension of the parts necessary to give birth to such a child, a laceration of the perineum has occurred. There is really very little laceration apparent now; it, however, extended originally to the sphincter-ani muscle, for I here see, a little to one side, a scar which extends down to that point; and I think that some of the fibers of the muscle have been lacerated, as there is a want of elasticity at this portion, and I also find a hæmorrhoidal condition at the termination of the rectum.

This gives us an illustration of a laceration of the perineum which has in part been repaired by natural or primary union, and very nicely too. There is not much scar tissue; the union has been prompt and good, so far as it went. We obtain this result sometimes in lacerations—*i. e.*, union without the aid of sutures.

We are liable to be deceived about the extent of the laceration at the time it occurs. The parts being hypertrophied, and sometimes swollen, just after labor, the laceration appears enormous, giving a feeling to the touch as if the perineum were lacerated entirely through into the rectum; and yet, upon a careful examination, you may find it to be a laceration in the second degree only.

Now when the union takes place promptly, as it did in this case, you get a good perineum; but, when you get a union by granulation, which gives a large amount of scar tissue, it is apt to cause trouble, as these scars are often extremely painful. The little bit of scar tissue which you get when the union is prompt is harmless; but when you get a mass of scar tissue as thick as your finger, with nerve fibres caught up in this tissue, it gives rise to the most severe pain and suffering, and impedes locomotion.

I had a case of this kind last winter. The patient had a difficult labor, forceps being used in the delivery, and there was a marked laceration of the perineum; some effort had been made to restore it, but it was a long time healing, and then only partial union was secured through a large mass of intervening scar tissue. When she had risen from her bed and attempted to walk she was seized with violent pains in the region of the perineum; this occurred on every subsequent attempt to walk, and finally she gave up the idea of walking. Some time after, she came under the treatment of a good practitioner, and I was called in consultation, the case having previously been diagnosticated as separation of the symphisis pubis. I examined her carefully, but could find no satisfactory evidence of separation of the symphisis at that time, but yet it was impossible for her to walk. I found a large quantity of scar tissue in the perineum, a large mass in the centre so exquisitely tender that if you touched it the patient suffered agony. I immediately advised the removal of this scar tissue, and the operation was afterwards performed, resulting in the restoration of a good perineum without any tenderness; and she is now walking around, and is perfectly comfortable.

While she was under the anæsthetic, I was enabled to satisfy myself beyond doubt that there was no separation of the symphisis pubis, and I do not believe there ever had been, as the result of the removal of the scar tissue tended to prove, her difficulty of locomotion and this severe pain upon each attempt to walk being due to sensitive scar tissue.

You see, then, that in laceration of the perineum the continuity may be restored by intervening scar tissue, and yet the result may be very unsatisfactory. When such painful and tender scars are found, the only treatment is to remove the nerve tissues, bring the parts together with sutures, and obtain mediate union of the normal tissues.—*N. Y. Medical Journal.*

GONORRHŒA EASILY CURED.

Founding an opinion on the recent text-books and treatises on this disease, one would imagine there had been little, if any, progress in its treatment. The young practitioner, without practical experience, who undertakes the management of gonorrhœal cases by the plan of treatment generally recommended in these works with nauseating mixtures and conglomerate injections, will certainly be discouraged, and find his cases dragging along, or quit him, to become rounders. In cases of acute gonorrhœa I have, for eight or ten years, used carbonate of lithia to alkalinize the urine, and find the five grain compressed tablets, one taken three times daily, very convenient, fulfilling every indication better than any other salt. I now rarely find it necessary to give any other remedy internally.

Should the case fail to respond to the following injection, and not show marked improvement in two or three days, two sandalwood oil capsules may be given, three times daily, for three or four days. The injection I have used in cases of acute and sub-acute gonorrhœa for more than a year, with the most gratifying results, especially to the patients, who have recovered in from two to seven days, and paid me from one to three visits, is the following:

℞ Resorcin,..... 3 j
Acid. Boracic,..... gr. xx
Zinci acetatis,..... gr. ¼-½
Aquæ destillat..... f. ℥ iv. M.

Of this solution two teaspoonfuls are injected three times daily. The germicides, resorcine and boracic acid are so slightly astringent that it requires the additional zinc salt to restore capillary tonicity. This injection is quite or nearly painless.

In the treatment of the latter stage of sub-acute and chronic gonorrhœa, without stricture or granu-

loma as a complicating factor, I have had the happiest results follow the use of the following injection;

Hydrargyri chloridi corrosivi,.... gr. ¼-ss
Zinci chloridi,..... ..... gr. ss-j
Aqual destillat..... ... f ℥ viij M.

Sig.—A tablespoonful to be injected well down into the urethra, three times daily.

Corrosive sublimate injections are by no means a recent addition to the list. The rationale of their use, however, is recent. As in the injection for acute cases, the germicidal constituent must be so sparingly used (otherwise it produces great pain and reactive inflammation)that I find it very advisable to combine a more astringent salt; and the chloride of zinc is the one I have selected, for obvious reasons. Without doubt, a mild injection of corrosive sublimate and chloride of zinc is destined to be *the* injection for sub-acute and chronic gonorrhœa.— *Z. T. Dellenbaugh, M.D. The College and Clinical Record.*

THE TREATMENT OF CHRONIC BRONCHITIS.

By T. J. Yount, M.D., Lafayette, Ind.

"Winter cough" has been known for untold centuries. Nebuchadnezzar no doubt had this disease, for the physicians after dosing him with villainous decoctions, nauseous infusions, and diabolical extracts, turned him out to grass. They did not find a single specific or panacea in all the medical literature of their forefathers for chronic bronchitis. The chronic bronchitic then, as now, was a victim to be pitied.

During the winter and spring months he sits in the house, in a snug corner, near a roaring fire, huddling together his skin and bones lest they get separated and lost. He sits there in his corner with his cuspidor handy, morose, dejected and irritable to those around him. His face is pinched, and his color yellow, he eats little and sleeps less, worried and worn out with cough. In the summer, like a ground-hog, he comes from his hole, wrapped up in a thick ulster with fur collar, and cap drawn down over his ears, and his feet encased in large arctic overshoes. He walks slowly and swears rapidly at his ill-luck in having such a disease. He likes to tell how he feels, and gives all the blame for his illness to the weather and his liver.

The chronic bronchitic, like the white corpuscle, is of a very migratory character, migrating from one physician to another and travelling from one end of the earth to the other. It is seldom that you see a patient that has not been treated by at least half a dozen physicians, and he rarely tarries long with any one, but seeks new fields and medicines. In the treatment of this disease we must support our patient, ease cough and pain, promote digestion and appetite, and render substantial aid during an acute attack.

Suppose, now, you are called to see a patient during an acute attack, where there is a swollen condition of the bronchial mucous membrane, with scanty secretion, harassing cough, urgent dypsnœa, and great pain. He sits upright, face livid, pulse weak and rapid, and the respiration shallow and frequent. He begs in Heaven's name for a moment's relief—for just five minutes' rest and sleep. You have all seen him.

Relieve this sufferer now and he is your life-long friend and patron. You must act, and act promptly, or all is lost. You are like the man in Texas, who, when he wanted a revolver, wanted it *awful* bad. Just so with you; you want to help the patient, and you want to help him very bad. Suppose you give him a dose of morphine, that will surely ease him, but the probabilities are that it would be permanent, and you could no doubt next day read his obituary notice. Opiates act first on the hemispheres, by dulling their sensibility; this dulling of sensibility extends to the medulla oblongata, which becomes paralysed and your patient dies, simply because the carbonic acid in the blood fails to irritate this centre of respiration and have it call on the expiratory muscles to assist in throwing off this accumulated carbonic acid poison. If it is, therefore, not safe to give opiates or chloral, what will you give? We must rely on respiratory stimulants, good ones that will not fail us. There are three well-known stimulants that are considered perfectly reliable and potent, viz: ammonia, strychnia and belladonna. Of the preparations of ammonia, I prefer the aromatic spirits, or the carbonate. In very serious cases, twenty drops of aromatic spirits, or ten grains of the carbonate, with twenty drops Squibb's compound spirits of ether, given hourly or every half-hour, affords great relief. If the heart is feeble and rapid ten drops tincture digitalis should be aded once in two hours. If they are nervous and want rest, give bromide of ammonia in one-half or one drachm doses as often as is needed. Rokitanski first found that strychnia was a potent respiratory stimulant. T. Lauder Brunton, J. Milner Fothergill, and H. C. Wood have long recognized strychnia as a very reliable and rapid stimulant. Fothergill, in severe cases run gives as large as one-tenth grain doses of strychnia every four or five hours, and oftener if necessary. He says desperate cases demand desperate remedies. His favorite prescription for ordinary acute attacks is:

℞. Ammon. Carb.....gr. v-x.
Tr. nucis vom.....M x.
Tr. scillæ..... ..... ʒ ss.
Infus. serpent...@..... ℥).
M. et. sig.—Take every three or four hours.

He adds ten minims tincture digitalis to this mixture if the right ventricle is weak. Belladonna is also a reliable stimulant. It is of special value where there is general want of tone, giving rise to profuse night and day sweats. You have all given

atropia for night-sweats of phthisis, and you have noticed that the patient, while benefited by the arrest of the sweats is also greatly benefited in his breathing, breathing less rapidly, taking deeper breaths and less dyspnœa in walking about. In some cases where it is absolutely impossible to get relief from severe pain in the side by other means than opiates, give atropia, and morphia combined.

I have often given persons suffering from a mild attack of chronic bronchitis the muriate of pilocarpine, in one-tenth to one-twenty-fourth grain doses every hour or two with great benefit. It has many advantages over ipecac and squills. It is pleasant to take and does not nauseate. It is very prompt in loosening the phlegm, distressed breathing, and annoying cough. It has a decidedly stimulating action on the skin, mucous membranes, heart, and kidneys. Fothergill's father always taught him "never to give squills until the skin is moist and the phlegm loose, and always to give ipecac as long as the skin was hot, and the phlegm tough." If such is a safe rule, and Fothergill says it is, then we ought to use pilocarpine in all acute stages of disease of the bronchial mucous membrane with great advantage. Inhalations and sprays may often be used with benfit. I heave derived the most benefit in my own case from sprays of benzoate of soda, ten to twenty grains to one ounce, followed by prolonged sprays of compound tincture of iodine, ten to thirty or forty drops to one ounce. These used in this manner three times a week generally result in a decided arrest of the profuse secretions and start up a healthy action. Sprays of nitrate of silver, carbolic acid, tannic acid, potassæ chlorate, and zinc sulphate can be used either in sprays or inhalations, with benefit where the secretion is too profuse. The application of irritating liniments and solutions often scatter and relieve pains like magic. My favorite application is:

℞ Tr. iodini..... ..... ℥ ss.
Ætheris sulphurici..... ʒ ij.
Os. tiglii..... ʒ ij.
M. et sig.—Apply as directed.

Where the patient is suffering from an acute pain in the side and is feverish and nervous the application of an ointment composed of acidi salicylici ℥ ij.; morphia sulph., gr. j.; acid. oleici, ℥ j.; adeps ℥ ss. should be made.—Applied three or four times a day or oftener, until relief is afforded. By this application you avoid giving opium by the stomach, which, as a rule, destroys the appetite, impairs digestion, and renders the liver inactive by arresting the normal secretions and perverting their healthy action. In cases of chronic bronchitis, where the secretions are scanty and dry, full doses of iodide of ammonia, say of twenty grains, three times a day. By combining the iodide of ammonia with copaiba, cubebs, eucalyptol, or arsenic, you produce a decided effect upon the secretions, often arresting them and having a decided curative action. The liver should also be looked after in this climate, and its action should be assisted by an occasional doze of calomel, podophyllin, or elixir wahoo. Quinia in tonic doses, taken for weeks, is of decided benefit. Fellow's compound syrup of hypophosphites, containing, as it does, quinia, with potent nerve-tonics, is a valuable preparation.

Gardner's syrup of hydriodic acid, a non-irritant preparation, containing, it is claimed, ninety-nine per cent. of iodine, has a decided curative effect on this disease. I have used it on myself and many patients, and have experienced almost immediate benefit by the arrest of the profuse secretions and cough. The only objection to it is the strong and pronounced metallic taste which invariably follows its prolonged administration, causing loss of appetite and consequent debility.

It should be given in teaspoonful doses three times a day at the commencement, and gradually increased to two or three teaspoonfuls three times a day, well diluted in Burgundy wine, porter, or water. In my own case I have had the most prompt and decided benefit from Declat's syrup of nascent phenic acid. It is pleasant to take, and its action has in my hands been very pronounced. It should be given in larger doses than the directions on the bottle. I experienced no benefit until I had taken six drachms three or four times a day. Under the six-drachm doses in one ounce of whisky or a wine-glass-full of Hoff's malt, my light, harassing cough was relieved, the exhausting night-sweats ceased, the appetite improved, and sleep was rendered natural. In fact, under ten days' administration of the acid, more rapid and permanent improvement was made than ever before in any previous attacks. Its administration in such large doses should not be persisted in longer than two weeks at a time; then it should be suspended a week or ten days, and commenced and kept up as before, gradually lessening the dose as the disease disappears. I have often prescribed this syrup in obstinate coughs where relief was not obtained by the ordinary remedies, and have had good results.

To obtain good results you must give the syrup of the nascent phenic acid, and you must give it unsparingly. You will get no appreciable results from a half tablespoonful, and may be compelled to give it in two tablespoonful doses. In cases where there is great debility and no appetite, great advantage may be obtained from taking frequent egg nogs or milk-punches. These may often be preceded by a wineglassful of Hoff's fluid malt, etc. When there is great despondency and nervous prostration, decisive advantage may be had from ext. cannabis ind., gr. ½–j.: ext. hyoscyam., gr. ij.; quinia sulph., gr. ij.; taken three or four times a day. The sleeping-room and bed should be warm on arising and retiring, for the reason that the chill from getting into a cold bed and getting up in a cold room gives rise to severe and prolonged coughing. It is also a good idea to take a

good alcoholic night-cap before retiring, as it tends to produce sleep and quietude. Patients with chronic bronchitis should not take alcoholics before going out into the cold air, for the reason that alcohol dilates the capillaries in the skin and makes the patient more liable to take cold. If he wants a drink let him take it after coming into the house. He should wear flannel underclothes the year round, and during the cold and changeable weather should wear a chest-protector.

It is advisable that the patient should take a trip to some equable and mild climate, such as San Antonio, Los Angeles, Aiken, S. C., or New Mexico, during the cold and winter months. New Mexico is to be preferred above all as the sanitarium of the world for lung and bronchial disorders. Let him who doubts this statement go and see for himself, and he will return a healthier and better man.

The Creator in His all-wise and all-powerful mind saw that sufferers from chronic bronchitis needed a special habitat. He therefore gave unto the world and the sufferer the United States because it had New Mexico in it, that one State created for no other purpose than invalids.—*New York Medical Record.*

TREATMENT OF ECZEMA OF THE GENITALIA, PRURITUS, AND LEUCORRHEA.

In cases of eczema, in which glyceroles and unguents have failed, the following formula has been successful:

Chlorate of potassium,.....30 grains;
Wine of opium,.....50 grains;
Pure water,.....1 quart.

Applied to the parts by linen compresses covered with oiled silk. If there is much inflammation, precede this with warm hipbaths and cataplasms sprinkled with powdered carbonate of lime. In obstinate pruritus, associated with leucorrhea, a tablespoonful of a mixture of equal parts of tincture of iodine and iodide of potassium, in a quart of warm tar water (tar-water holding the iodine in the solution) used daily, night and morning, removes the pruritus and ameliorates the leucorrhea. In fetid leucorrhea two or three tablespoonfuls (in a quart of warm water, morning and evening, as an injection) of the following formula will be found useful:

Chlorate of potassium,.....13 parts;
Wine of opium,.....10 parts;
Tar-water,.....300 parts
Or,
White vinegar (or wine),.....300 parts;
Tinct. eucalyptus,.....45 parts;
Acid, salicylic,.....1 part;
Salicylate of sodium,.....20 parts.

One to five teaspoonfuls in a quart of warm water, as an injection, two or three times a day.—*Obstetric Gazette.*

THE CAUSE OF CHOLERA.

In October last the German Scientific Expedition which was sent to Egypt to investigate the circumstances of the cholera outbreak there, made a report of their researches, which contains much information important to be known by physicians. They seem to prove beyond a doubt that cholera is connected with, or caused by, living germs introduced into the human organism.

Although the commission did not arrive on the spot until after the virulence of the epidemic had considerably abated the investigation, at once set on the foot under the able direction of Dr. Koch, yielded results so interesting that an application was made to the German Government, and acceded to, that the commission might be authorized to proceed to India, and continue the study of the disease in its Asiatic home. One fact appears, however, to be already clearly established, namely, that in every cholera corpse examined, a particular form of bacterium, resembling in size and form the bacillus of glanders, was found in the coatings of the intestines. In some cases the bacilli had penetrated into the utricular glands of the mucous membranes, and there set up considerable irritation: they also had settled in larger numbers on the villi of the in estines, and had often penetrated into their tissue. In severe cases which had terminated in bloody infiltration of the mucous membrane of the intestines, the bacilli were found in very large numbers, and they had not confined themselves to the invasion of the utricular glands, but had passed into the surrounding tissue, into the lower layers of the mucous membrane, and, in some cases, right into the muscular skin of the intestine. It is interesting to learn that similar bacilli were observed by Dr. Koch a year ago in a cholera-infected intestine received from India; but in that case the possibility of their having been a product of putrefaction was not excluded. As these bacilli were observed in Egypt in all the cholera cases investigated, and were not found in the intestines from several persons who died from other diseases, or even in one case where a man had died from another disease a few weeks after he had recovered from an attack of cholera, Dr. Koch feels warranted in saying that there can be no doubt that they stand in some relation to the operation of cholera. But he is careful to point out that it cannot yet be concluded that they are the cause of that disease, and that it could just as well be assumed that the operation of cholera causes such disturbance in the mucous membranes of the intestines, as that among the many bacteria always parasitic in the intestines one form of bacilli is thus enabled to penetrate into the tissue of the mucous membrane. In order to determine this point, it seems necessary to isolate and cultivate the bacilli, and ascertain whether they are capable of reproducing the disease in a fresh subject. But, in connection with this branch of the investigation, there is a difficulty that has not yet been surmounted, in that no animal has

yet been found which is susceptible to the choleraic poison. Dr. Koch and his colleagues have experimented upon mice and monkeys, dogs and poultry but hitherto without results, although it was almost certain that some, at least, of the matter injected, was capable of setting up the disease in a human subject. Another point of interest that requires to be cleared up is the observation that in some places the epidemic dies out long before all the people have taken the infection, although infectious matter still remains scattered over the district. This is thought to indicate that conditions arise under which the infectious matter loses some of its virulence.—*Popular Sceince News.*

A CASE OF HÆMOPTYSIS.

Dr. Ross R. Bunting of Philadelphia sends to *Science News* the following note regarding an interesting case of hæmoptysis occurring in his practice :—

Hæmoptysis is not usually regarded of itself a dangerous manifestation : it is only as a symptom of commencing phthisis that it is of serious import. In very rare instances do we find an *immediately* fatal result ; yet occasionally we meet with cases in which the hemorrhage is kept up for days and weeks. I was called some time since to see a young man (aged twenty-seven) with family history of phthisis, who was bleeding profusely from the lungs. This hemorrhage was succeeded by another in twenty-four hours ; and for two weeks there occurred sometimes two hemorrhages in the day, amounting in all to twenty-one distinct hemorrhages. The most approved remedies—as ergot, gallic acid diluted sulphuric acid, and tinct, digitalis—were administered without effect, the hemorrhage still continuing. It was very evident, that if the flow was not checked, judging from the patient's condition he would soon die from exhaustion. A bladder filled with ice was kept constantly applied to the upper part of the chest. One-half grain of opium and two grains of acetate of lead were given every two and three hours. These remedies were kept up one week after the cessation of the hemorrhages, which lasted fourteen days.

What I would refer to particularly in this case is the successful employment of the *old-fashioned remedies*, acetate of lead and opium. I have employed them in various other cases of internal hemorrhages, and, for steady use of days or weeks, much prefer them to ergot or gallic acid.

TREATMENT OF WHOOPING-COUGH.

Dr. J. Coopreider of Taylorsville, Ind., writes us that he has used the *fluid extract of chestnut leaves* for whooping-cough, with great success. He says :—

The dose employed is from fifteen to sixty drops, according to age. If the child is large enough, I give it in hot water as an infusion, sweetened ; to a small child, in simple syrup or elixir.

It not only relieves or lightens the paroxysms, but will actually cure in from four to five days.

I give four to six doses per day, according to the severity of the case.

If good fresh leaves can be procured, I make the infusion as a tea, say two drachms of the leaves to half a pint of boiling water, and give two ounces at a dose, sweetened with white sugar.

INGROWING NAILS.

The following practical hints from the *Journal of Cutaneous Diseases*, on the management of ingrowing nails, are well worthy the attention of such of our readers as have to deal with these troublesome ailments :—

When the nail threatens to grow into the skin, or has already injured it, the first indication is to put on a sock of moderate size and to remain quiet. Afterward the nail is to be scraped on the affected side till it is sufficiently thin ; then it is to be seized with a delicate forceps, raising it in a sense inversely to its natural curvature. This having been done, a small lamina of lead of a few millimetres' thickness is to be inserted beneath the nail, and after folding it over the toe it is to be fastened there with a strip of plaster. In this manner, the granulations being no longer in contact with the margin of the nail, the pain ceases, and the sore heals more or less rapidly ; during the whole of which time the apparatus should be frequently inspected, so that the limina of lead may not become displaced. Besides this, it is necessary to scrape the nail every two or three days, so as to keep it thin and flexible until the skin returns to its natural state, and can resist the pressure of the nail, and then the lead is removed. Hebra treats ingrowing nails, in the following manner : Cut some flakes of lint of the length of the lateral groove of the nail, or a little longer. The lint is to be placed on the nail, parallel to its groove ; then, with a flat probe, introduce the lint, thread by thread, between the flesh and nail. Thus the parts are separated, with the little cushion of lint lying between. The sulcus is then to be filled with pledgets of lint, and, finally, long narrow strips of adhesive plaster are to be applied, always from about the inflamed sulcus downward, in such a manner that the latter is still farther removed from the margin of the nail. With such a dressing applied with sufficient care, there is no pain whatever ; and the patient can in a short time put on his ordinary stocking, and walk without trouble. After twenty-four hours the strips of adhesive plaster are to be removed, being previously softened in a bath of tepid water. This dressing is to be repeated daily ; and in from two to four weeks it will be found that the toe is entirely well.

RHAMNUS PURSHIANA.

The re-appearance of reports on this drug, which a few years ago excited such a considerable degree of professional attention, has characterized the periodical literature of the latter months of 1883. The cause of this renewed attention to this drug on the part of medical writers is more directly traceable to the interest which it has excited during the past year in Great Britain. The *British Medical Journal* has contained a number of very flattering reports on its efficacy, and the other journals have contained similar reports. The drug seems to have obtained a very strong foothold among our conservative brethren of the British Isles, and judging from the reports which have been given of its action in their hands, it is fulfilling the requirements of a tonic-laxative in that country.

The *Therapeutic Gazette*, for December, contains a symposiac on cascara sagrada, from which we select some facts which do not seem to have been very generally familiar. Dr. C. W. Tangeman, of the Medical College of Ohio, has subjected it to a series of physiological experiments, the results of which he contributes as follows :

1st. Cascara sagrada, when given in small doses (fifteen to twenty drops), acts like a vegetable bitter on the stomach ; it increases the flow of gastric juice, stimulates the peptic glands to increased action, thereby bringing about healthy gastric digestion.

2nd. It acts on the sympathetic nervous system, sending an increased blood supply to the intestines.

3rd. It increases to a limited extent peristaltic action of the small bowels, but increases it very much in the colon, and especially in the rectum.

4th. It has a specific action on the rectum in the way of peristalsis, to cause this portion of the bowel to unload itself.

5th. It does not affect the passage of the food in the small intestines any more than a bitter tonic would.

6th. It is not a safe remedy in pregnancy or uterine disorders, especially when given in cathartic doses.

7th. It does not affect the larger glandular organs, liver, pancreas or spleen, even when given in cathartic doses.

8th. Hypodermically the remedy will never produce the permanent good results in chronic constipation that are obtained when it is given by the mouth.

9th. When employed subcutaneously it acts simply as an evacuant to the rectum.

10th. The same quantity given hypodermically that produces marked effects when administered by the mouth, will not have the same effect clinically or physiologically.

Dr. T. L. Wright, of Bellefontaine, O., discusses the peculiar applicability of cascara cordial, of which rhamnus purshiana is the base, in the treatment of the constipation of elderly persons. In this class of cases many of the symptoms which are usually associated by physical decay are directly traceable to constipation, and Dr. Wright has found that cascara cordial, through its tonic-laxative properties, removes this condition, greatly to the improvement of the person's spirits.

Dr. F. C. Herr, physician to the South-Western hospital of Philadelphia, after extolling the value of cascara cordial in dyspeptic disorders, speaks very highly of the preparation as a vehicle for the administration of the more unpalatable drugs. He regards the encroachments of homœopathy upon regular medicine as largely due to the persistent refusal of the old school of practitioners, so-called, to acceed to the demands of a sick public for palatable medicines. He has found in cascara cordial a vehicle which at once succeeds in disguising the taste of many disagreeable drugs, and at the same time meets the indication so commonly present for an easy and agreeable laxative. In discussing its applicability in the treatment of young children he has found in this cordial a preparation which is calculated to supplement to a very large degree the " carminative bottle," which has been in so much demand among young children. These baby-mixtures are too often unsafe and should be given with a spare hand, and if cascara cordial shall be found on future trial to verify Dr. Herr's claim for it, it will indeed prove to be a very valuable addition to the physician's armamentarium.

CORROSIVE SUBLIMATE IN GONORRHŒA.

Dr. Joseph McChesney, of Deming, New Mexico, contributes to the *Therapeutic Gazette*, for December, a report of a series of seven cases of gonorrhœa in which he employed by a way of treatment, only a solution of corrosive sublimate, one grain to six ounces of water. The results are already very surprising. In several of these cases this injection was resorted to after a long and unsuccessful course with the ordinary remedies in such cases, and the result was uniform success. He resorts to these injections, which he gives once every four hours, after the subsidence of the acute stage. He is very confident that, properly applied, this solution will effect a cure of the gonorrhœa within from eight to ten days after it has been resorted to.

VESICATION IN DIPHTHERIA.

D. W. F. Bartlett, of Buffalo, New York, communicates to the *Therapeutic Gazette*, for December, the results of his experience in the use of cantharidal blisters in diphtheria. His plan is to apply the blister immediately on the appearance of the exudate in the throat. The theory is that the materies morbi is eliminated through the blistered surface, while the counter-irritation thus caused relieves also the engorged pharyngeal surfaces. He regards the exudate in the thorat as

merely an announcement of the presence of the poison in the blood, and that from the nature of the epithelium or impinging of inspired air primarily upon those surfaces, the partial elimination of the morbid element is accomplished.

THE CANADA MEDICAL RECORD.

A Monthly Journal of Medicine and Surgery.

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SUBSCRIPTION TWO DOLLARS PER ANNUM.

All communications and Exchanges must be addressed to the Editors, Drawer 356, Post Office, Montreal.

MONTREAL, FEBRUARY, 1884.

MONTREAL GENERAL HOSPITAL.

We believe that the Medical Board of the Hospital propose recommending to the Governors certain changes in the Medical Staff of the Institution. Dr. Gardner and Dr. Major, two of the Out-door Physicians, will, if the advice of the Board is followed, become, respectively, Gynecologist and Laryngologist to the Hospital. It is also, we believe, suggested that the Out-door Staff in future be called Assistant Physicians instead of Out-door Physicians, and, like the In-staff, they be divided into Physicians and Surgeons. We question very much the wisdom of the latter changes. We much prefer the title of Assistant Physicians, and regret that it was not at first selected. Now, however, that we find men on the Out-staff who are the senior in years and superior in professional position to some of the In-door or Attending Physicians, the idea of their becoming the Assistants to these men is not calculated to make them feel pleasant.. They will have to submit, but we mistake their temper if they do not loudly protest. As regards the division of the Staff into Physicians and Surgeons we consider it absurd, and but another evidence of the craze which seems to have overtaken those who formulate the Medical dogmas on the Medical Board of the Hospital. Although the In-door Staff has had this division for several years, we do not yet possess a single Surgeon pure and simple in the City of Montreal—all of them are general practitioners. The existence of such a division in Hospital work when none such exists in practice, is the occasion of very frequent gross injustice to the rank and file of the profession. It is a question yet to be settled whether our City can support one Surgeon who alone practices surgery. We believe it will, others think differently; but there is no question it will not support six or eight. Why then attempt to make those who to the public are both Physicians and Surgeons, become simply Surgeons on Hospital work. We see no benefit, and predict that, if carried out, it will engender a feeling of distrust among the profession, which we would deeply regret to see established.

THE MATRICULATION EXAMINATION OF THE COLLEGE OF PHYSICIANS AND SURGEONS, PROVINCE OF QUEBEC.

The large percentage of rejections at the matriculation examinations of the College of Physicians and Surgeons of the Province of Quebec has given rise to a great deal of dissatisfaction among the unfortunates. This was of course to be expected. The matter, however, seemed worthy of investigation, and those connected with the Boards who looked into the subject were struck with the fact that it was upon certain studies that the majority failed. Clearly this pointed to a defect in training, and a committee was named by the College to meet the Matriculation Board and the directors of the various educational institutions in the Province and investigate. About forty invitations were issued, and some dozen representatives responded—a few however, being deputed to represent other institutions than their own. These gentlemen met the following members of the committee of the College, viz., Drs. R. P. Howard, E. P. Lachapelle, F. Wayland Campbell and Lanctot, on the 24th January, in the rooms of the Medico-Chirurgical Society. An informal discussion took place, the meeting lasting about two hours. It will, we believe, be productive of a vast amount of good for, in our opinion, the discussion at the meeting proved that not a single institution in the Province outside of the Universities gave

an education capable of preparing pupils to pass the *entire* examination preliminary to entering medicine. Mr. Shewan, a gentleman for many years connected with the Montreal High School, largely engaged in preparing students for the examination, gave it as his opinion that the amount of Latin translation was too extensive for the time allowed, and that it would be better to curtail in translation and extend in parsing. This view was heartily endorsed by the representative of St. Francis College, Richmond. Altogether we consider that the result of the meeting proves the wisdom of the action taken by the College. We may add that there never has been any idea of rendering the examinations less stringent.

A GUIDE FOR THE MEDICAL EXAMINATION OF RECRUITS.

We have received from the Militia Departmen a copy of a small *brochure* bearing the above title, which has been prepared by Surgeon Major Neilson of "B" Battery 1st Regiment Canadian Artillery. Its appearance is opportune, as the Government are at this moment enlisting a force of three hundred men to serve for three years as an Infantry Corps. We have examined the little book with care, and must congratulate Dr. Neilson on the thoroughness with which he has prepared his work. A civil surgeon has but little idea of the many points which arise in considering the fitness of a recruit for military service. A study of this volume will enable those whose duty it will be to examine candidates for military service to secure for the Government a class of men, who will do credit to their corps and to the country. We hope the Government will place it in the hands of the Surgeon of every Volunteer Corps.

PHYSICAL EDUCATION.

To our friend Barnjum, Montreal is indebted for one of the most pleasing features of the recent very successful "carnival," in the shape of a rehearsal by his young ladies' and children's classes of their most interesting exercise. The pupils, numbering in all ninety-five, went through these in such manner as to delight the large audience present, many of whom congratulated Mr. Barnjum very heartily upon his work. The rehearsal included marching at the double, free gymnastics, Indian club swinging, dumb bells, bar bells and varied exercises.

We were glad to notice a large attendance of medical men, including many of our visiting brethren, all of whom expressed themselves delighted with the exhibition. Mr. Barnjum is unquestionably doing valuable work for the rising generation, and we trust our city *confrères* generally will avail themselves of his open invitation to call in upon him during working hours, and see what is being done in the direction of physical education in our midst.

PERSONAL.

Dr. Vineberg (M.D., McGill, 1878 and Gold Medallist), of Portage la Prarie, has been in Montreal several weeks on a visit.

Dr. Foley (C.M., M.D., Bishop's College, 1880) has returned to Montreal, and resumed practice. We are pleased to say that his health has much improved.

We regret to hear of the illness of Dr. Loverin (M.D., McGill, 1854) at his home in this city.

Dr. Richard MacDonnell (M.D., McGill, 1876) has been appointed Assistant Medical Officer to the Grand Trunk Railroad.

Dr. Stewart, professor of Materia Medica in McGill University has been elected an Attending Physician to the Montreal Dispensary in place of Dr. McConnell, resigned.

Dr. McConnell, Professor of Materia Medica in Bishop's College, has resigned his position as one of the Attending Physicians to the Montreal Dispensary, and been placed on the Consulting Staff.

Dr. Digby of Brantford, Ont. (M.D., McGill, 1863) visited Montreal during Carnival week, as also did Dr. Phillip of Brantford (M.D., McGill, 1863).

Dr. Rogers, having recovered his health, has returned to Ottawa and resumed practice.

Dr. Roddick of Montreal, when last heard from, was in Algiers.

Dr. Marsden of Quebec has been appointed a commissioner of the Marine Hospital, Quebec, in place of Dr. J. A. Sewell resigned.

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CERTAIN FORMS OF CLUB FOOT.

By Wm. H. Hingston, M.D., L.R.C.S. Edin.,
Surgeon to Hotel Dieu Hospital.
Professor of Clinical Surgery Montreal School of Medicine.

(Read before theMedico-Chirurgical Society, January 25.)

It is precisely one hundred years since, as Adams says, the treatment of club foot was limited to mechanical appliances, when Thilenius proposed the division of the tendo-achillis by an open wound; sixty-eight years since the division of the same tendon subcutaneously was performed—if Delpech's operation deserves to be so designated; and fifty-three years since Stromeyer improved upon the operation of Delpech by puncture and subcutaneous division. The modification of the operation of Thilenius, so far, concerned the manner of dealing with the tendo-achillis, for to that tendon alone was imputed all the blame of the deformity; until comparatively recently, when other structures,—tendinous, muscular, ligamentous, bony, have received attention.

I intend here to speak only of that inveterate form of club foot; not of that simple form with which all are familiar, and which the nurse's and, later, the mother's hand alone may remedy; nor of that other form which mechanical appliances may easily correct; nor of the milder form which tenotomy alone will cure; nor of a still severer form in which tenotomy of certain tendons, aided by mechanical appliances, suffice to remedy; but of that still severer form in which division of all the tendons and fascia commonly, or exceptionally at fault, followed by the use of the best mechanical contrivances, are powerless to remedy. One such case I exhibited to you last year, in the person of Emelie Boileau, aged 15 years, upon whom I had operated in the early part of 1881 for exaggerated talipes equino varus.

It may be in the recollection of some of you, that, when I showed to this Society the young girl in question upon whom I had performed the operation which had been introduced to the profession by Dr. Phelps, of Chateauguay, N.Y., based on the principle enunciated by Dr. Post of New York in dealing with wry neck, I mentioned that I had already, with the tenotome, divided, without much amelioration of the deformity, all the muscles usually at fault in this affection. There remained, to undo the excessive arch and shortening and doubling-in of the foot, excision of a portion of the tarsal bones; but the additional shortening of the foot that would result, not to speak of the considerable risk to limb and life of opening into the inter-tarsal articulations, made me disinclined to resort to it. You saw the result of the operation in a completely straightened foot, without any diminution, but with increase of its length, and with but temporary impairment of its strength. The operation, so far as the members of this Society knew, was a novel one, and one not without the apparent qualification of rashness.

I shall give short notes of a second, third and fourth, and two photographs of the last.

J. McG., æt. 19 years, the subject of exaggerated talipes equino varus entered the Hotel Dieu on 12th February, 1883.

He had been born with the deformity, but, as years rolled on, the deformity became greater.

The heel was drawn up; the foot very strongly inverted, and bent inward upon itself. The patient walked on the outside of his foot; and the usual cutaneous and tarsal thickness existed there. I could not undo, in the slightest, this exaggerated deformity. I divided subcutaneously the plantar fascia, tibialis posticus, and anticus, and the flexor pollicis and long flexor digitorum, and, lastly, *as is usual with me*, the tendo-achillis. With the exception of bringing down the heel, the deformity, notwithstanding considerable force, was not relieved—the excessive arch remaining as before. I then adopted free open incision; swept the knife across the sole of the foot, dividing tissue after tissue till the bones were reached.

The excessive arch was then in great measure, but not completely, remedied. Across the ball of the foot a padded splint was applied, and on this adhesive plaster to which were attached cords which led over pulleys, and a weight of 12 lbs was suspended. With the exception of looking after the footpiece, and sliding it nearer to, or farther from, the open wound, no surveillance was needed. The dressing consisted of vaseline for the first two days, and afterwards carbolic lotion and red wash, as suppuration was more or less abundant. When the patient left the hospital, on 30th April, his foot was quite straight and supported his weight comfortably. I have since learned that the foot is in every respect like the other.

Case III.—Is that of a boy, J. D., aged 10 years, who entered the Hotel Dieu under my care on 15th October, 1883, for double congenital talipes equino varus. The deformity in both feet, but chiefly in the left, was excessive, and no amount of force, even under chloroform, could diminish it. Subcutaneous division of the supposed faulty tendons of the left foot was performed, and in the order named in previous case; but, apart from giving greater freedom to the heel on the division of the tendo-achillis, the rigidity and deformity remained. I then used the scalpel very freely to the sole of the foot, dividing all the tissues down to the bone, and gradually unfolded the excessive arch. This added most markedly to the length of the foot,—the cut edges at their centre gaping apart to the extent of nearly two inches. I had difficulty in keeping up extension. The boy was a mischievous fellow, difficult to control. Pulleys were ineffectual, as they were tampered with either by himself or some other patient. But what was found to restrain him effectually was a quickly-setting plaster-Paris splint, with a fenestra opposite to the incision. Through this the gaping wound was filled with tow soaked in Peruvian Balsam and renewed once a day. Granulation went on with surprising rapidity to the end. (I may here say, by way of parenthesis, that Peruvian Balsam, applied in this way, is without exception the best remedy with which I am acquainted, and fully merits the favor in which it is held by Sayre and others.)

Case IV.—This subject was the same as the preceding, the foot this time being the right one. As the deformity was not so great as in the left I hoped, by free subcutaneous division, to remedy it in great measure; but the relief obtained by tenotomy was so inconsiderable that I proceeded at once to treat it as I had the left. The order of division was as in preceding case, with this difference, that structures already divided subcutaneously required no further attention by the open wound. The great difficulty in the treatment of the second foot, as in the first, was to keep up proper extension. Every additional day in the hospital added to the

boy's cunning and to his desire to display it, regardless of consequences, to the admiring patients around him. During my absence of a couple of days from the city the boy manipulated things as he wished, and on my return, finding the old state of deformity partially restored, I put him again under chloroform and forcibly extended the foot. This forcible tearing open of a partially healed wound, I may add, was followed by more suffering than was the original "operation."

In talipes equino varus, however exaggerated the degree, there is, there can be, no contraction of either the abductor or of the short flexor of the little toe. The plantar fascia is almost always at fault, and its division remedies to some extent the deformity. The division of the flexor brevis muscle still further relieves the tension; the separation of the flexor longus digitorum still further; division of the tendon of the flexor longus pollicis still more markedly; and that of the flexor accessorius still further. The lumbricales, as they are on the phalangeal side of the incision, escape division—while division of the tendon of the tibialis posticus completes in a satisfactory manner the relief of the deformity, unless, as in Case I., the long calcaneo cuboid ligament, a much longer ligament than its name implies, be also partially severed.

The hemorrhage is not what might *a priori* be expected. The internal plantar artery, 'tis true, is divided; but the external plantar, much larger than the internal, escapes division, if the knife be not needlessly carried beyond, or in front of, the base of the fifth metatarsal bone

Leaving the large external plantar untouched, its numerous distributing branches suffice to keep the muscles, and the digits and their appendages, abundantly supplied with blood. In no case was the temperature of the foot on the distal side of the incision lowered, and granulations sprang up as abundantly on that as on the central side.

The internal plantar nerve is divided early in the operation; and, if the incision be carried too far back, the external plantar suffers, also: but this would be unwarrantable. Respect for the arteries prevents our carrying the incision too far forward; and respect for the nerve too far backward.

A question will now obviously suggest itself: Why not divide all these muscular structures subcutaneously? And in the answer to which lies the gist of the whole question: the skin itself is largely at fault, and must be divided; and the division of the artery necessitates an open wound. In Case II. every muscle and tendon were divided down to the bone, but the relief was not what I expected till the unfolding process had gone on for several days after division.

In the third and fourth cases (those of the young boy) I was disheartened at the imp's devices with the aid of other patients in the ward to relieve his foot of restraint. The weight and pulley were not equal to him.

The quickly-setting plaster, to which a little salt had been added, applied under strong extension, suited admirably in one foot; and in the other a simple and inexpensive device suggested to me by Dr. Phelps, and which I now show to you, was used with satisfaction.

Most of you are familiar with the method of applying adhesive plaster around the foot, and along the outer side of the leg; but in this plan the plaster so applied is divided between its two attachments on foot and leg, and two pieces of

thick wire like telegraph wire or two buckles are attached, and these are drawn together with cord and tightened as the plaster loosens. This device is a simple, inexpensive and efficient one, and is much better than the single piece of adhesive plaster which, when it slips, becomes useless.

What is, 1st, the position of the operation; and what are, 2nd, the limits of its application? It is a most useful one, and one which, compared with excision of a wedge-shaped portion of the scaphoid—an operation which hitherto has not met with any considerable favor—is simple, safe, and requires no dexterity whatever in its performance.

What are the limits of its application? These appear to me clearly defined: 1st. Eliminate all cases in which, by hand or by mechanical appliances, or by both, deformity can be relieved.

2. Eliminate all cases which can be relieved by tenotomy.

3. Eliminate all cases where these, or any of these methods, or all combined, may suffice; for in all those cases would the operation by open division be totally unwarrantable.

But in those cases of exaggerated club foot, as in those now submitted, with excessive arching and shortening, and more especially with narrowing and rolling in of the foot upon itself, *which can not be relieved by the usual methods*, operation by open division offers important advantages.

RIVERSIDE, SAN BENARDINO COUNTY CALIFORNIA, AS A HEALTH RESORT.

By J. F. T. Jenkins, C.M., M.D., etc.

During a recent visit to Riverside, Southern California, I was very much impressed with its advantages as a resort for persons suffering with diseases of the respiratory organs and with the many delightful aspects of its climate and scenery.

Until within the last few years but little was known of this charming locality, and many mistaken ideas still prevail as to the conditions existing there. Public attention is now, however, being specially directed to this semi-tropic sanitarium as one of the most desirable on the Pacific Slope, both for health, pleasure and residence.

Riverside has one of the finest situations in the State, an elevation of nearly 1000 feet, and at all seasons of the year a mild, dry and bracing air. Its position is central, located on the California Southern, and distant about eight miles from the Southern Pacific railroad at Colton. It can thus be reached in a few hours by rail from Los Angeles. The people are of a refined and highly intellectual class, and are chiefly engaged in fruit culture. Most of the present settlers left their Eastern homes to recruit their health in this invigorating atmosphere and, deriving benefit, have made it their permanent abode.

The strongest point of this climate is its evenness. It has much to gain by a careful study of its meteorology and comparison with the most favored of other sections. The following table speaks for itself. The mean average heat of July and the mean average cold of January is given as conveying a more correct idea than a comparison of temperature by taking the annual thermometric mean.

	Heat	Cold	Difference
Riverside, California	70	51	19
Jacksonville, Florida	83	55	28
San Antonio, Texas	84	52	32
Atlanta, Georgia	79	46	33
Denver, Colorado	72	26	46
St. Paul, Minnesota	72	15	57
Malta Island	78	56	22
Cairo, Egypt	85	58	27
Nice, France	75	45	30
Mentone, Italy	73	40	33

In glancing at this table it is seen that Riverside heads the list as being least troubled with extremes of heat and cold. This, coupled with the fact that it has much less rainfall than any of the places mentioned, is conclusive as to its right to be ranked among the first places claiming the attention of the medical profession.

Perhaps the most important point in connection with this locality is the fact that within a short distance almost all varieties of climate may be had. Invalids who need a colder climate can get it by going up into the mountains where the rarified air is laden with the odors of the balsamic fir and pine tree. As the mountains reach an altitude of from 8,000 to 11,000 feet all the advantages claimed for Colorado can be obtained here, and it is the facility with which invalids can reach elevated regions and at the same time remain within easy access to all the comforts and luxuries of city life that makes it a place of such importance as a health resort.

As a proof of the dryness of the atmosphere it may be mentioned that fresh meat remains in the open air for an indefinite length of time without

undergoing putrefactive changes. In fact, meat is cured at all seasons by merely slicing and hanging in the sun. In Autumn, grapes are made into raisins simply by exposure on shallow trays. Although the atmosphere is so dry it is never oppressive, and heat is much less severely felt, even with much higher temperature than in more humid localities.

It is estimated that consumption does not cause the death of more than four per cent. of the natives of this region. This was predicted by an able writer on climatology many years ago, and during the time that has elapsed results have to a great extent verified the truth of this prediction. In the whole State the total number of deaths from pulmonary affections is reported as less than ten per cent., of which a very large proportion are imported.

The climate of Riverside, without considering its many other attractions to the invalid, is sufficient to make it a place of great importance; and as these advantages become more widely known it will doubtless largely increase in population. It is situated in a fertile valley near the waters of the Santa Anna, from which it derives two parallel artificial rivers for irrigating its vineyards and fruit groves extending over eight thousand acres of land. By its nearness to the mountains and distance from the sea it enjoys the tonic and bracing tendency and much greater dryness of the higher levels, at the same time that it is freed from the moisture attendant upon the more direct breeze from the ocean. All tends to make it the *climatic desideratum*, as it is the crowning glory of this lovely land. The country around for several miles, including the beautiful colony of Arlington, is now contained within the corporate limits of this new city, and presents the idea of one vast garden with productions of almost every conceivable kind.

The home-like influence is complete, and the invalid has the advantage of congenial and cultured society, so there can be little loss of the home feeling so essential to the wavering in health or spirits. On every hand the surroundings are mountain, hill and dale. Splendid drives, along magnificent avenues, bordered with hedges of magnolia, eucalyptus, pepper, palm and cypress, extend in all directions through groves of the orange, lemon and lime. Valley and *mesa* are covered with trees, shrubs and flowers of tropical luxuriance. Such is the *locale* of the city, so rich in natural charms and beautiful scenery that one can enjoy the healthier pleasures of the country with all the advantages of "life in town." Fortunate is he who can add the delights of such conditions with the environment of a centre of intellectual activity, social refinement and taste for the beautiful as exists in this matchless spot of the Golden State.

In this brief description it would be impossible to detail all of the many reasons for placing it in the front rank, *if not in the first place*, as compared with other American and foreign climates. It is in nearly the same parallel of latitude as Atlanta, Georgia, Palmero in Italy, Jerusalem, the Delta of the Nile, Shanghai, Seville and Gibraltar. Many tourists who have visited the leading health resorts of Europe declare that its skies excel those of Italy, Greece and Spain.

Snow never falls in the Riverside district, but it may be seen crowning the great mountain peaks, which glisten in white for many months together.

One of its principal advantages to the invalid is its perfection throughout all seasons. Those whose means will not allow of a semi-annual change must have some place where they can *remain*. They can enjoy but a few short months in the West Indies or Florida; even along the famous Riviera coast of the Mediterranean, at Mentone, Nice, Cannes, San Remo and Monaco, they only possess in part, from December to March, the conditions enjoyed at Riverside during the entire year.

Each season is so much alike, and passes so imperceptibly and gradually from one to the other that the change is hardly realized. It has a mild winter suited to the invalid, with a summer suited to the requirements of the native of any northern clime. The air is so clear that, with the naked eye, small objects may be seen many miles away. A noticeable feature is that moisture does not condense on plastered walls or on windows. The effects of this pure atmosphere must be experienced to be appreciated. Under its influence a delightful dreamy languor pervades the system. The western breeze is wafted o'er one's face with a soft, enchanting touch, and one fully realizes the pleasure of life in such a sunny, congenial semi-tropic land. With these soothing influences a new vigor is infused into the body, followed by a better appetite, refreshing slumber, and constantly increasing strength. A little color is seen returning to the faded cheek, hope is revived. Improvement, at first gradual, becomes more and more perceptible.

Hygienic medicines produce the desired effect, and the credit is properly given to the climate.

This section is doubly dowered, having the advantage of the two zones without the drawbacks of either, this results from two causes: first, the protection afforded by the encircling mountain ranges which isolate it more or less from the rest of the country; second, the influence of the great ocean stream called the Kurosiwo, which, after sweeping around the islands of Alaska, strikes the coast of this portion of the State with a temperature never varying but slightly from 56°. Although Riverside is situated quite a distance inland this influence always keeps the atmosphere temperate. There is an almost constant breeze from the west. In fact, this breeze might be said to form the characteristic feature of the climate. It blows harder in summer than in winter, and with the temperature of the sea at from 54 to 58 it can be easily understood that the stronger the wind the warmer in winter and colder in summer. When the air becomes heated by the sun it rushes up the mountain sides in a steady current, and to fill the vacuum thus created in the valley below the ocean air (now dry) is drawn "in gentle zephyrs" through every opening in the surrounding hills.

The visitor to Riverside will find excellent hotels and good boarding houses. "The Glenwood,' with a quartet of a mile of broad verandah, overlooking two and a half acres of orange trees, vines and flowers, is first-class in all its appointments "The St. George" is also all that could be desired for comfort and convenience, and at very moderate rates. At either place carriage and saddle horses for hunting, camping or riding about for amusement may be obtained.

In conclusion, the writer may venture to state that of all the places he has visited, either in Europe or America, Riverside possesses beyond all comparison the greater number of elements which may be considered as essential to the formation of the ideal health resort. It has the charm of the most attractive spots in Switzerland. From the piazza of the hotel the lofty mountain tops of San Bernardino, San Jacinto and Greylock may be seen, just as Mont Blanc is viewed from Geneva and the Jungfrau from Interlaken. All who have sought this master-piece of a bountiful Creator, in quest of pleasure or health, agree in pronouncing it *par excellence* as the place most calculated to build up and strengthen the *morale* of the dejected in spirit or failing in health.

28 Richmond Square,
Montreal, March 1st, 1884.

Society Proceedings.

MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

Stated Meeting, Jan. 25th, 1884.

T. A. Rodger, M.D., President, in the Chair.

Case of triple birth at 7th month of gestation, in two of the fœtuses development had been arrested at about 4th month.—Dr. Beaumont Small, of Ottawa, sent down the above 4 months' fœtuses along with the following history and remarks:—

The patient was a young woman of delicate health who had always been anæmic and troubled with menorrhagia. During the first four months of married life the prolonged menstrual periods continued without change. She then became pregnant, her general condition improved, but she persisted in performing heavy household duties. During the early months of pregnancy there is no history of any condition likely to cause injury to the contents of the uterus. During the last month before delivery there were marked signs of irritability of the uterus. Slight disturbances, such as driving over a rough road and jumping easily from a buggy, were followed by pains and distress much more severe than the causes would lead one to expect. About a week before delivery she fell upon her side, receiving a severe shock; active pains ensued and continued until delivery. I was not able to find out if the membranes had been ruptured at the time of the injury. Upon my arrival labor was well advanced, the os fully dilated and waters discharged. During examination a loose body was detected projecting from the os which I endeavored to recognize as an arm or leg. To my surprise it became loose and was easily withdrawn—proving to be fœtus No. 1, in a black, shrivelled, flattened state, differing very little from its present appearance. The flattening was due to compression between the head and pelvic walls. No placenta was attached. In a short time a well-nourished but lifeless fœtus of about seven months' development was delivered: it had been dead for a day or two only. The placenta followed easily, there was no sign of its being a double organ, or of any attachment of the other fœtus. Shortly after fœtus No. 3 was removed with its placenta attached. This placenta was elongated, and evidently fœtus No. 1 had been joined to it. Convalescence progressed favorably,

and the patient regained her comparative good health. There is no instance of multiple births having occurred in her mother's family. The cause of this unusual condition, I think, can be traced to the impoverished physical condition of the patient. The burden proved too great for the enfeebled uterus—the single placenta proved the stronger and attracted the greater show of nutriment—the other was correspondingly weakened and ultimately destroyed. Such instances of the power of toleration possessed by the uterus are rare. At a recent meeting of the Obstetrical Society of London a similar condition was reported in a twin birth. One other member only had met with the same in his practice.

Dr. KENNEDY had never seen a similar case. He thought that pressure stopping the circulation was the cause of death of the specimens exhibited.

Dr. WM. H. HINGSTON read a paper on *Certain Forms of Club Foot:* This paper will be found among our original communications.

Dr. SHEPHERD said that Dr. Hingston ought to be congratulated on the results obtained in the cases just quoted, and spoke of the success which Dr. Davies has in these cases, where he operates by removing a wedge-shaped piece from the scaphoid bone.

Dr. HY. HOWARD asked Dr. Hingston if the wedge-shaped opening which fills with granulation tissue ever contracted later on, as he had seen operations on the eyelids which, after healing, were perfect, become a source of trouble from contraction of the granulation tissue months after. In one of these cases, that of a lad, it became necessary to perform a rhinoplastic operation. A bit of the check was transferred to the upper lid, and, later on, whisker hairs grew from this piece.

Dr. HINGSTON said that in the face this was so —the tissue would contract; but in the foot, which with each step was stretched, this would not occur In the girl operated on two years ago there is no contraction.

Dr. WOOD exhibited two *Albinos*, and gave the following particulars:—Two boys, aged respectively 9 and 6, with congenital nystagmus, the elder having also right convergent strabismus. They are both albinotic—white hair, eyebrows, skin, and choroid; also pink irides. The eyes are very sensitive to light, and the children are both myopic. They are now, and have always been healthy. There is no other instance of albinism in family or in any way of parental relatives. No parental consanguinity or chronic neurotic disease. Other children healthy; none dead. The children are perfectly intelligent, and the elder has learned to read, although he suffers from inability to bring about proper ocular fixation. The elder child has fair distant vision, though they both suffer from amblyopia. Excitement of any kind increases the oscillation of eyeballs. On examination by ordinary light, the interior of eye can readily be made out. The mother had nothing to say regarding prenatal impressions of any sort. There are four children in family, and these are second and third. Dr. Wood said the question was, how should their eyes be treated?

Dr. KENNEDY thought colored glasses, by absorbing some light, would be useful.

Dr. HY. HOWARD had seen several similar cases. He used to treat them successfully by using ordinary colored glasses covered with chamois leather, leaving a slit-like opening in the middle of the leather.

Double Nipple.—Dr. CAMPBELL mentioned having lately seen a man with two nipples on his left side, and said that Dr. Howard of Lachine had recently seen a case of double nipple on each breast.

Dr. SMITH had seen a similar condition in a woman.

Traumatic Delirium—Dr. HINGSTON mentioned that lately he had had an unusual complication follow several operations, viz., violent delirium, with high temperature, lasting four or five days, but never ending fatally. Some of those cases occurred in private practice, others in hospital, and all in temperate patients. He asked if any of the members had similar cases.

Dr. TRENHOLME said he had seen several cases of high temperature, accompanied with delirium, follow delivery at the Western Female Hospital.

Condolence.—The following resolutions of condolence were passed:—

Resolved.—That the members of this Society have heard with deep regret of the death of Dr. John Reddy of this city, which took place in Dublin on the 23rd January. The Medico-Chirurgical Society of Montreal feels that in the death of Dr. Reddy, one of its former Presidents, it has lost a member of the profession who, in his entire work, proved himself to be devoted to its best interests.

Resolved.—That this Society extends to the family of the deceased its deep sympathy in the bereavement which has befallen them.

WHAT THE ANCIENTS KNEW ABOUT OBSTETRICS AND GYNECOLOGY.—TRANSLATIONS FROM THE LATIN EDITION OF ORIBASIUS OF THE 4TH AND AETIUS OF THE 6TH CENTURY.

By G. M. B. Maughs, M.D., Prof. of Obstetrics and Diseases of Women, Missouri Medical College ; President of Obstetric and Gynecological Society, etc.

Through the kindness of Dr. Dickinson I have here a most rare work, perhaps the most valuable work in the world on medicine, and almost certainly the only copy that has ever been west of the Mississippi river, and as you will see it is a work that has been very little consulted even by the learned men of Europe. This book, a Latin translation of Oribasius and Aetius is three hundred years old, and is to many a revelation touching obstetrics and gynecology ; it is evident that the medical writers of to-day have not read this work. For instance many have supposed that Récamier invented the speculum. It was known that a speculum had been in use, but it was supposed to be a very imperfect instrument. All supposed that James Y. Simpson was certainly the first to use sponge tents and uterine sounds but, as we shall see, sponge tents and uterine sounds, were in use centuries before. We all supposed that Amussat was the first to make an artificial vagina, but we will see that Archigenes, a distinguished gynecologist of the first century, made artificial vaginæ also ; so that we see there is nothing new under the sun. These persons were just as familiar with those things as we are. Obscurity occurs some times, and it is difficult to translate these things because they lacked terms to convey the idea. For instance, the term "vagina" does not occur in all these books, and when the vagina is intended they use *sinus pudendi*, which generally means vagina, but is sometimes used to mean the fissure between the labiæ. This difficulty arises from the lack of express terms. If Demosthenes were resurrected to-day, and possessed all the command of language for which he was celebrated, he could not find words to express the idea of telegraph and telegram, and yet these are Greek. Now this difficulty occurs here. They knew perfectly well what they were talking about, but did not have words to express themselves. Thus Oribasius speaks of the vulva as lying between the bladder and the intestines, etc. I will state that this book is a translation into Latin of the fourth century. Oribasius, who was court physician to the Emperor Julian, was commanded to write a work on Medicine, and made an epitome of all the works on Greek and Latin medicine, in seventy books. This great work was translated into Latin by Dr. Rasarius of Novariensis in 1553. This work was published before the almighty printing press had made the multiplication of copies so cheap, and when much was done to save time and trouble by contracting words that would admit of contraction. These old writers had to buy parchment, and the sheep skin cost money and the writing time, so that there was a double object in these contractions ; then again the u and v look alike, and it requires some pains sometimes to determine which it is, and the "i" and "j" are alike, so that you will observe that there is some difficulty in reading it.

I will read to you first from Oribasius, on Procidentia :

DE UTERO PROCIDENTE.

"In the first place I empty the bowels, and the bladder may be emptied with the reed catheter, and then the patient being placed in the supine position, with the pelvis elevated and the thighs bent and the legs separated, the surgeon takes a warp of wool of the size and mold of the vulva—and wraps it with linen cloth and dips it in the juice of hyposistus and acacia." Saturates it with astringents and places this against the uterus and gently lifts it into position. "He now introduces the sponge into the vagina, and places the woman upon her back in bed with her thighs together, and one leg crossed over the other ; and on the third day he removes the tampon and washes out the vagina with an astringent decoction, and again introduces the tampon, and sometimes places balsam upon the pubes and lower portion of the belly, and continues to keep the parts clean by washing them with astringent injections until a permanent constriction has been induced." Now I will read from the last sermon or discussion of the last one of the four books of Aetius.

"Concerning the rationale of conception and parturition and the diseases of females, more especially of the uterus and mammae, and also on the preparation of most valuable ointments and potions and fumigations : "

THE UTERUS, ITS SITUATION, SIZE AND FORM.

The uterus, Greek metra, is called the matrix because all life, as it were, originates from the matrix. It is called hystera because it is situated beneath all the viscera. The site of the uterus is between the peritoneal membranes of the bowel ; between the bladder and the straight intestine. The size of the uterus is not the same in all, for the uterus is often much less in those who are not pregnant, and much greater in those who are pregnant ; and in those who never have had venereal connection it often remains through life of small size. Its greatest length is between the pubes and the umbilicus, and is attached to the symphysis pubes by ligaments. Its greatest breadth is between its two horns which arise in either side of the fundus. These horns first pass upwards and then turn back and bend finally to either side, where they are fixed to two sinuses tubes, and one lies upon either side of the uterus, and are erected during coition and drawn up, or conduct the semen from the female testicles. "And there is an opening in the neck of the uterus through which the

menses pass out and the womb receives the male semen, and the fœtus itself, incredible to relate, also passes through it. For the remainder of the time it is scarcely large enough to admit the point of a *sound*; but during labor it extends until the whole fœtus passes through it.

THE MANNER OF THE FORMATION OF THE AFTER-BIRTH.

" This is the way the secundines are generated: the vein and the artery at its mouth where it enters the uterus has at its extremity tubercles, just like haemorrhoidal eminences, and these are less in women than in the cow and goat and the deer and other like animals. But in brutes are softer and more mucous, and look like rootlets of plants. These eminences in the mouths of the veins at the time of conception in the woman are open, but following the time of menstruation they are closed and remain so the rest of the time, and are only open at this particular time, and conception at this time is impossible because it would be washed away. After the abundance of the discharge of the menses is over they are closed, at which time the semen is retained. At this time the semen being received and retained in the ureters reaches the acetabulum to the left or to the right, and conception is completed; the secundines are generated from the open mouths of the vessels opening at the summit of the uterus and on either side. This is the manner in which the after-birth is generated. After the conception the mouth of the uterus is again closed.

ON THE MENSES.

" At fourteen years of age the menses appear in woman. It is not the same time with all, nor is the quantity the same or the number of days through which the menses continue, but often more, sometimes less. Sometimes the interval between the menstrual periods is twenty-two and sometimes as high as thirty days, but seldom as late as the thirty-fifth day. It is a rare thing for a woman to menstruate after she is sixty years of age, and at this time the menses cease completely which have flowed abundantly heretofore; it begins with a flow of small quantity and irregularly and soon ceases entirely.

THE MANNER IN WHICH WE ARE TO KNOW WHEN A FEMALE HAS CONCEIVED.

The first argument or reason for knowing that a female has conceived is that the semen after coition was retained; if in the act of coition she perceived some shivering and felt some pain about the vulva and umbilicus; if the mouth of the uterus is closed, and not hard from inflammation but is closed within and without and a little elevated, if the venereal appetite still remains, where the menses fail to appear at the usual time, if the veins of the chest begin to turn green, and the mammæ to become intumescent, and where in the process of time the milk appears in the breasts; if about the second month of pregnancy the woman has the usual appetite for salt and acid substances; where the color is turgid, becoming pale or becoming red if the woman is robust; if following the second menstrual purgation the symptoms of pregnancy were aggravated and the mammæ intumescent, with difficult movements of the loins, with red and high colored urine accompanied with pain when it was discharged, and where, after the menses, the heat of the cervix and vagina was decreased.

THE SIGNS WHETHER THE FŒTUS IS MALE OR FEMALE.

Hippocrates and others have noted that the signs of a male child were: if the pregnant woman is of good color and if the right breast is larger than the left, and especially if the nipple is so, then it is a male child. And if, on the contrary, the color is pale; and if the left breast is pale and very tumid and larger than the right it is a female child. If it is a male child the vessels of the right parts—the veins and arteries—are very intumescent, especially under the tongue; and in a female child the contrary appears. So likewise the nipples in a pregnancy with a female child turn downward; and in a male child they turn upward; but the most certain and least fallacious of all is that in pregnancy with a male child the pulse in the right hand and arm is quicker and larger and harder than it is in the left.

DE FŒTUS EXTRACTIONE.—ON EMBRYOTOMY.

" Before resorting to exsection of the fœtus we may try medicine. Whether it will not relieve the woman or whether the case is deplorable, and where in this manner we may not relieve her we must relinquish the case as hopeless. The fatal symptoms of this affection are lethargic sleep and faintness, from which they are aroused with difficulty and after calling on them in a loud voice they respond feebly and fall back again in deep sleep; likewise when they are seized with convulsions and with trembling of the nerves, and the pulse is rapid and full nothing can save them but delivery. For this purpose the woman is placed in bed in the supine position, with the head low and the pelvis elevated. First we give two or three mouthfuls of bread with wine, and sprinkle wine upon her face for the purpose of arousing her from her depression of spirits. The surgeon now separating the pudenda with instruments examines whether it is a tumor or a callus eminence, or whether it may be removed by operation and if so he seizes it with a volsella and cuts it off with the scalpel, as will be related hereafter; but if the membranes obstruct the mouth of the womb it should be cut off also, as we will relate hereafter; but if the obstruction arises from the great solidity of the membranes that surround the fœtus he must distend it with a volsella and puncture it with the scalpel, and enlarge the incision with the finger, so that the fœtus can pass through it. And if the head of the fœtus obstructs he must turn by the feet and

then deliver. And if he can not break up the obstruction in any other manner he must fix the hook of the tractor instrument in the eye or mouth or under the chin and extract the fœtus. And this is the manner of extracting with the instrument. The tractor instrument is held in the right hand and the hook covered by the fingers of the left hand with which it is introduced gently and fixed in some selected part; and then the other instrument is introduced in a similar manner and fixed upon the opposite part, and traction is made equally and declined to neither side and not greater nor less is the traction to be made on one instrument than upon the other until the fœtus is delivered, and the direction of the traction is not alone in a straight line but obliquely from one side to the other. The fingers must be smeared with some kind of ointment and introduced within the os uteri, and passed around the impacted body. After the fœtus has been half extracted the instruments are to be transferred and fixed in a part above, and if the head, either from nature or from hydrocephalitic affection is tumid with water, and produces an impaction from its great size, it is to be opened with the scalpel and the waters evacuated, and the contracted head extracted. But if this can not be done, we must break up the calvarium and take out the bones with the fingers but if this fails they must be extracted with the bone forceps. The tractor instrument must be fixed in the parts and the fœtus extracted. And if the head is delivered and difficulty occurs with the shoulders we must in the same manner dissect out the clavicle and open up the cavity of the thorax and evacuate the humors so that the mass will collapse. But if the obstruction occurs from a too great distension of the belly, because the fœtus is dead, the same method must be pursued. We must open up the abdomen and remove the intestines. But if the hand is prolapsed we must resect it from the humerus, first having thrown a linen bandage around it and drawn it down slightly by which we can reach the articulation of the humerus, and having separated the labia and pudenda, we must dissect the part, and after this we must introduce the left hand, and thus bring forth the fœtus. The same thing is to be done when both hands are prolapsed, and in a similar manner when the feet are prolapsed. But if the body does not follow we must dissect the limbs loose from the groin and the hip joint, and if the fœtus becomes doubled, and we are not able to unfold it, and if the head is most exposed, we must break up the bones and dissect it out, then we must fix the tractor instrument upon this part and extract it and draw out the limbs and dissect them at the hip joint, and dissect the coxal articulations and break up the pelvis as we did the head. But if the belated head is detained, the left hand is to be anointed with some kind of oil and introduced into the fundus of the uterus, and the head is to be seized and brought through with the fingers into the os uteri and one of the tractor instruments fixed in it. And the proper place for fixing the tractor instruments are the head, eyes, meatus of the ears, mouth, anterior parts of the chin, in the thorax, axilla, clavicle, præcordia, the breasts, vertebral raculiations, legs and bones of the pubes, the female pudenda if it be a female child. And then if the mouth of the womb is closed, if there is inflammation, no violence must be used, but we must anoint the parts with fat and use irrigation and cataplasms by which the inflammation is reduced. And after the mouth is dilated and the fœtus is delivered, and after the dissection of the fœtus we must compose again the parts diligently, observing that no parts have been left behind."

QUOMODO OPEM OPORTET EIS QUÆ NON TUTO CONCIPIUNT.

The manner in which we may extend aid to those women in whom conception is hazardous:

Conception in some women is attended with great danger, either because of the smallness of the uterus, or because the fœtus is not able to escape, from the narrowness of the neck of the uterus, or from a tumor, or a like condition of the bones of the pelvis which impedes parturition, and certainly it is best in these if they can altogether avoid parturition, for if they conceive it is necessary to destroy and dissect the fœtus. Therefore from the rule of destroying the fœtus we must take measures for the induction of sterility. For that which induces sterility differs from that which destroys the child; this done, conception is prevented; that done, and the child is destroyed and removed. Therefore, as the woman must not conceive, she must avoid congress with the male at the time when conception is most likely to take place, which is manifestly just before and just after the menstrual period; and then at the time of coitus itself, when the semen of the male is ejected, she must hold her breath, whereby the semen is not carried into the cavity of the uterus, and she must get up immediately and place herself upon her knees, produce sneezing, and cleanse the pudenda carefully. And for the prevention of conception the os uteri must be anointed with honey, or with opobalsam or cedar oil, either by itself or mixed with white lead or liquid alum or galbano with wine. To the same end cold and astringents when carried to the meatus just before coitus close the mouth of the uterus, and prevent the semen entering its cavity Warmth, truly, not only incites the male semen but expels it from the uterus, and likewise draws the other humors and smears over the parts, and by avoiding those things that are followed by conception, sterility is induced.

It is here seen that "there is nothing new under the sun." The reasons here given for preventing conception are legitimate and proper, and the means used doubtless efficient in most cases. The chapter is doubtless by Aspasia, who is credited with the one preceding it, on the aids to difficult parturition, and who, doubtless, is also the author of the article following this, on the means of pre-

venting conception, and, from its fullness and the undoubted efficiency of many of the means taken, there is no reason to doubt that it was for quite different purposes than to prevent conception in deformities. Doubtless the women of Greece and Rome had the same objection to bearing children that gives to the gynecologist hundreds of cases among women of the present day, and if this long list of medical suppositories and potions given by Aetius were less efficient than some of those used at the present day, they were also less dangerous.

DE UTERUS OBSTRUCTIONE.—OF OBSTRUCTION OF THE UTERUS.

There may be obstruction about the mouth or neck of the uterus, either because of previous ulceration, or from induration from inflammation from which the part is so greatly narrowed as not to sufficiently admit the semen; or, this being admitted, is not retained, because, on account of the hardness, the womb cannot contract. If, however, the semen being admitted and retained within the greatly narrowed os, a fœtus is caused, this indeed leads to the death of the pregnant woman because of the too great contraction of the parts the fœtus cannot be expelled. In this case we must use decoctions of fennel and oil and water, and relax the parts with emollient supposi, tories of wax and those prepared from œsypufs turpentine and nitre. And when the parts are sot-to the touch we must introduce a *sponge tent with a cord attached* within the contracted part for its sufficient dilation, *and after its removal we must introduce a larger one, and for this purpose we must have prepared many and different sized sponge tents*, and afterwards we must smear the sponges with the following ointment: Ext. Sandarach, dry alum, aa. ℥i; orpiment ℥iij., rubbed up together with honey. *The sponge tents are placed in this until coated over; and if it is seen that the dilated spouge has not sufficiently opened the part, and inflammation has sprung up*, the sponges must be covered with the following ointment: Iridis ℥ii-goose grease, turpentine, frankincense, oil iridis aa ℥i. First the iridis, then the frankincense is reduced to the finest powder and sifted, then the turpentine and goose grease are added, and they are all united together. But when the inflammation has subsided and the part is open the sponge may be smeared with a preparation of rose oil and goose grease, in the use of which we should persist until cicatrization is induced and the place slightly consolidated. This is evidently from Archigines.

DE CALCULI UTERI.—OF CALCULI OF THE UTERUS.

Tufaceous calculi are sometimes generated in the uterus itself which, if we desire to extract, we first evacuate the bowels of stercor with a glyster, and then wash out the uterus with a decoction of fennel or mallow, mixed with resin, when the woman is placed supine with her legs separated and placed upon two stools. The finger of the left hand is introduced into the foramen of the anus, while the right hand compressed above upon the abdomen feels the calculus, draws and pushes it, at the same time with the finger in the anus conducts and pulls it, and when the tufaceous substance has been brought within the neck or the lips of the uterus, the woman being properly placed and the parts dilated with a *speculum*, it must be cut off with a scalpel and the parts sprinkled over with a dry medicated flower.

DE CALCULI VESICÆ MULIEBRIS.—ON CALCULI IN THE BLADDER OF FEMALES.

"Calculi are rarely produced in the bladder of women because they have a straighter and wider meatus urinarius, and when by chance it is generated it may be extracted thus: The woman being placed with her hips hanging over the edge of the table her legs bent and placed on two chairs. The finger of the left hand is introduced into the pudenda with the right placed above the pubes and expels the calculus against the neck of the bladder, and now a little above the wings of the pudenda, at which place the calculus has arrived, an incision is made, and it is seized with a calculi forceps and extracted. Afterwards the incision is filled up with frankincense, and clean wool imbued with warm oil is placed upon the abdomen, and two or three times during the day, and once during the night, it is removed and the place washed with warm oil; and on the third day we fill the incision with dry soft medicaments used for the formation of granulations, and continue this until the production of flesh is perfected."

DE UTERO NON PERFORATA.—ON NON-PERFORATION OF THE UTERUS.

"Some women have from nature the uterus not perforated, and this obstruction may occur at three different places. In some cases the obstructing membrane, or flesh springs from the sides of the pudenda itself or from the labia; in others the obstruction occurs within the vagina itself; in others again the obstruction is above the lips of the uterus itself. In those cases in which the membrane arises from the lips of the pudenda the cure is this: We place the patient in the supine position, with the legs flexed and separated, then with a scalpel, we cut away the obstructing membrane until the shape of the pudenda has attained the natural dimensions. Afterwards we fill the lacerated section with lint and bind it there, and for the cure of the suppuration we apply daily some kind of poultice, then we use lint imbued with rose cerate; and if, after section, the sides of the pudenda appear to be united by the joining of the fleshy parts, we again break them up and separate them with lint and pursue the same course of treatment. The woman must be placed in the supine position, with a pillow between her thighs until cicatrization is produced. But if where the external figure of the pudenda is open, the vagina is obstructed by flesh springing up within it, so as

to leave a narrow opening, the woman being placed in the same position a *sound* is conveniently introduced into the neck of the uterus for the greater safety, for we must not through error make the section too deep; then, guided by this sound (stilum), we must denude the part with a broad knife until the vagina is seen to be according to nature; then the labia being distended, we continue to dissect the flesh to a quadrangular shape, we trim off the dissected flesh, and stand the woman up, with the legs separated for the fluids which have collected in the uterus to readily flow away. When this has been done sufficiently the patient is placed in the former position, and lint imbued with wine and oil is placed between the divided surfaces; but this should have a cord tied around it that we may extract it readily. The parts being properly dressed we should command quiet. On the following day the place must be washed with water, wine and honey, and a tampon of lint immersed in ointment for suppuration is introduced, and when cicatrization has taken place a *tin tube* is introduced and bound in the vagina until the parts are consolidated. Should the parts again become joined together, so that the mouth of the womb is again closed, we must put in a *sponge tent* until the hardness has been removed. tut if membrane obstructs the mouth of the uterus aself the woman is placed in the same position and the vagina distended by the introduction of a speculum (dioptra), the membrane seized by a volsella, distended and twisted until all are bound together and amputated with a broad scalpel. A tampon of lint with a thread tied around it is introduced, and the same treatment pursued. Should there remain any of the membrane the cure may be completed by a medicated flower called psaro. To cleanse the part it may be washed with this medicated liniment: wax, turpentine, goose grease aa. ʒ ii; oil iridis, thuris, aa. ʒ i; saffron ʒ iij; oil irini ʒ xiv; rub up the saffron and frankincense into a paste, and mix them with the liquids until the whole becomes liquid. The introduction of the *speculum* must be continued and the flesh not allowed to spring up in the cavity, which can be prevented by the following medicament: ℞ scales of copper, rust of copper, frankincense bark aa. ʒ ij; rub up together and use; or the rust and scales of copper with lead mixed together and given. But the use of the sponge tents (spongiæ siccæ) is not to be discontinued until the hardness of the lips is subdued, also the tin tube is to be introduced into the canal.

ABSCESSUS ORIS UTERI CHIRURGIA.—THE SURGICAL TREATMENT OF ABSCESSES ABOUT THE MOUTH OF THE WOMB (PELVIC ABSCESSES).

"When an abscess exists about the mouth of the womb which can be treated surgically it is best not to incise too soon, but to wait until, by inflammation and pressure of the contained pus, the parts are greatly thinned. The woman is then placed supine in a seat with her thighs flexed upon her abdomen and the legs separated, with her arms placed under her thighs and properly bound by a cord passing over her neck, and thus arranged she is placed before a strong light. When the surgeon seated at her right side with a *speculum* instrument suited to the age of the patient, with the pudenda separated makes an examination, and with a *sound* measures the depth of the woman's vagina, so that he may not compress the uterus by having a *speculum* with too long a stem, and if it is found that the stem is longer than the vagina, he may place a roll of wool upon the labia or sides of the pudenda, so as to make the *speculum* firmer, The stem should be so introduced that the screw is turned to the upper part, and while the surgeon holds the *speculum* the screw is so turned by an assistant that the vagina is distended by the separating of the plates of the stem, and when the abscess is brought into view, if soft to the touch, and the apex thin, it may be opened with the point of the scalpel or a lancet, the pus being discharged, a thin piece of lint covered with rose cerate is placed in the incision, and a piece is also placed outside the incision within the vagina, and moist wools, or wet with pure oil, is placed on the labia pudenda, pubes and loins; then, on the third day, the woman is seated in a bath of warm oil, or decoction of mallows, and a thorough cleansing made, and a piece of lint smeared with tetropharmics by itself or with honey is gently placed within the section, and a cataplasm made of tetrapharmacum diluted with butter or rose oil is placed on the outside until the inflammation has subsided and suppuration established. But if there is difficulty in cleansing the wound it may be washed with a decoction of iridis by means of an ear syringe and a plaster prepared from calamine or lead, or that which is from the class of burnt preparation either diluted with rose oil, may be used until the wound has cicatricized. But if the abscess should be within the mouth of the uterus, surgery must not be resorted to, but the cure must be after the manner we have previously related."

This article is by the distinguished Greek Gynecologist, Archigenes, who lived A. D. 50. His uterine abscess, under our more accurate nomenclature would be known as pelvic abscess; it would however be the same thing, and the treatment here recommended could scarcely be improved upon at the present day. But what is of the greatest interest is his full description of the manner of using the vaginal speculum which—without any intention of describing an instrument with which he supposes every one is acquainted—gives us so accurate an idea of the instrument itself as to leave but little glory to Ambrose Paré in 1640 or to Astruc in 1761 or Récamier in 1801–1819 in *discovering* this useful instrument. All that was necessary with these discoverers was to read this chapter of Aetius on the surgical treatment of uterine abscesses, or the previous chapter by the same author. J. Y. Simpson's discovery of sponge tents is accounted for in so

admirable a description of the use, dangers and how to avoid, the latter, of sponge tents as to almost induce the belief that these *discoveries* were but *thefts*.—*The St. Louis Medical and Surgical Journal.*

THE SURGICAL USEFULNESS OF IODOFORM.

By G. Frank Lydston, M.D.

Dr. Hofmakl, at the conclusion in a paper on the surgical uses of iodoform (*Medizin-Jahrbucher*), draws the following conclusions:

1. Iodoform is an excellent disinfectant, and, as a rule, is a painless applications to wounds.

2. On account of its slight solubility, it is of little value in complicated wounds of cavities.

3. It does not prevent the occasional outbreak of erysipelas.

4. It is not a specific against scrofulous or tuberculous processes, and develops its healing properties most notably in ulcerous processes.

5. By keeping wounds fresh and clean it furthers granulation, though it has but little influence on the final cicatrization of the wound.

6. Very thin layers of powdered iodoform do not hinder union by first intention.

7. In pharyngeal and laryngeal diphtheria of children, iodoform does not give much better results than other antiseptics.

8. In wounds and ulcers of the mouth, rectum, vagina, as well as in open, easily accessible wounds in the cavities of bones, iodoform in the form of a thirty to fifty per cent. iodoform gauze, is an excellent antiseptic dressing.

9. Parenchymatous injections of iodoform generally cause a great deal of pain, and it cannot be said that they give very excellent results in fungous diseases of joints and glandular swellings.

10. Iodoform ointments and plasters are often of good service in parenchymatous goitres and chronic swelling of glands, joints and tendons.

11. Iodoform in large quantities is undoubtedly dangerous, and is more productive of good results and less hurtful in small doses.

12. Childhood is not a contraindication for the use of iodoform.

13. The preliminary cleansing of fresh wounds with weak carbolized water before using the iodoform dressing is of no advantage, so far as Hofmakl's experience goes.

14. The healing of scrofulous and tuberculous sores by iodoform does not prevent their return.

15. Iodoform is an excellent means for the thorough removal of disagreeable odors of neoplasms which do not admit of operation.

16. The occasional syringing of suppurating cavities with small quantities of iodoform emulsion will often have a favorable action on the quality and quantity of the pus.

17. The introduction of iodoform bougies into the urethra and bladder will often alleviate pain, as also in vesical tenderness and suppurative conditions of the bladder, and will exert a favorable influence on those conditions of the urine in which rapid decomposition takes place.

18. The application of iodoform bougies to long fistulæ of the soft parts is more hurtful than useful, as the fistulæ are only stopped up and the products of decomposition are not discharged. Equally unwise is the filling up of the mouth of a fistula with dry powdered iodoform. (*Am. Journal Med. Science.*

PHTHISIS.

By J. A. Octerlony, A.M., M.D., Professor of the Theory and Practice of Medicine in the Kentucky School of Medicine

Gentlemen:—At the last lecture I spoke to you about the pretubercular stage of phthisis. To-day I want to say a few words about tubercle. Tubercles occur in two forms—the gray and the yellow. They differ considerably in outward appearances, in general conformation, and in their tendency to disintegration, but chemically they do not materially differ.

What we call gray tubercle occurs in semi-transparent nodules—very small indeed—and tend to remain in the form in which it is first deposited for a considerable time. The yellow tubercular mass tends to rapid aggregation, to rapid disintegration, and very speedily forms an abscess. First there is a softening; then the mass becomes quite liquid and purulent.

Chemically tubercle consists of two elements—organic and inorganic. The organic consists of albumen and cells; not typical cells, but dwarfed, stunted, and mishapen, without nuclei, without any tendency to form new cells, to reproduction. These cells are surrounded by granules of fat.

The inorganic elements consist of phosphate and carbonate of lime. There is no fibrous stroma in tubercular matter as there is in cancer. Whenever you find fibrous tissue in the sputa, it is the result of destruction of the lung tissue.

How does tubercular matter grow? Surely by no vital change. It is incapable of any vital change at all. It enlarges only by continued aggregation on the exterior. A number of tubercles merge together, and then new tubercular deposit takes place on the periphery of this collection. But there is no cell proliferation. The cells are just like sickly people—incapable of reproducing their species.

When tubercle has once been deposited, what are the transformations that take place? To you this is an important consideration. First, we find that tubercular matter may undergo absorption. That is a glorious fact; but, unfortunately, it does not often take place. So seldom indeed that in a considerable experience I have never seen it occur. I have seen cases of phthisis get well, but never a case where I could say there was absorption of tubercular matter when once formed. I mean absorption *in toto*. It is possible, because

very excellent persons have noted cases in which, by unmistakable signs, the existence of tubercles in the lungs was made out, and in which there was complete subsidence of the symptoms and of the physical signs that indicate their presence in the lung. So we are bound to admit that in rare cases tuberculous material may become entirely absorbed and the constitutional symptoms disappear.

Another transformation which tubercles may undergo is this (and I could hardly say that it is a transformation, but it is one of the events which take place in phthisis): the lungs become tolerant of its presence; the constitutional symptoms disappear; the local irritation passes away; and the tubercular matter entirely unchanged for years perhaps, will lie in the lung-tissue in the condition it was when it first made its appearance there. There it may be absorbed in part. The albumen and animal portions become absorbed, the earthy constituents remain, and, becoming encapsulated, form calcareous concretions. These may remain for a long time in that condition.

Indeed when this change has taken place the subsidence of all the symptoms occurs. Sometimes, however, we find it does not take place exactly in this way; but while there is an absorption of the animal constituents of the deposit and a formation of concretions, still there is a little deposit of fresh tubercular matter on the periphery which undergoes softening, and thus this chalky material at last lies in a sort of cavity made for itself, which may finally invade a bronchical tube when the matter is expectorated. When that happens it is usual to find that the cavity which held the earthy concretion heals up. It is certain that under these circumstances the case runs a very slow course, and the occurrence of chalky concretions in the expectorated matters is therefore a favorable omen.

Tubercles situated close together often become aggregated and begin to break down, and in the process of destruction they involve the lung-tissue in which they lie, and large cavities, in proportion to the extent of the destruction, will follow. This, unfortunately, is the most usual course.

Now what special termination of any particular tubercular deposit shall occur, depends upon a number of circumstances, and these must all be taken into consideration. If you want to be successful physicians in the best sense of the term you must take broad and enlightened views. A man who simply sees facts and can not trace the connection between them never will be any thing but a routine practitioner, and will utterly fail to attain the highest degree of professional success.

The result, then, in any one case will largely depend upon the form of tubercular matter—whether it be gray or yellow.

Gray tubercles, as I have already told you, tend to remain unchanged for an indefinite length of time, and such cases as are characterized by the deposit of gray tubercles run a very slow course. They do not so easily take on destructive action, and in this fact you may find an explanation of another, viz., that there is the greatest difference in the course of termination of different cases of consumption. One case reaches a fatal termination in a year; another will go on for fifteen or twenty years.

Then the manner in which the tubercles are disposed, whether there are many or only a few, whether they are scattered in small amounts over a large surface, or whether they be massed together within a smaller circle. If there is a great mass of tubercular material in one point, it is not so favorable as when there are a few scattered here and there. Then, again, we must take into consideration the amount of irritation their presence excites.

When you come to study tuberculosis at the bedside you will find that a great many of the phenomena of the disease are only secondarily due to the tubercles. You will find many of the symptoms are symptoms of irritation, of constitutional disturbance, excited by the presence of this deposit in the lungs. Now we find that when there is very little constitutional disturbance there is much more likelihood of the absorption of the animal constituents of the tubercular material and the concretion and encapsulation of the earthy constituents. We are much more likely to have it lie innocuous than when we have evidence of great constitutional disturbance. And, fianlly, we will find that the course and duration of the disease and the transformation of the tubercular material will depend upon the subsidence and cessation, or the revival of that constitutional dyscrasia which first gave rise to the tubercular deposit.

Now if constitutional disturbance disappears we may look forward to absorption, more or less perfect and complete, of the tubercular deposit; but if, on the contrary, we find that it does not subside, then we will find that an unfavorable progress and transformation will be certain to ensue.

Consumption is, in the first place, a disease of nutrition. It is a constitutional disease. It is a diseased condition of the system in the course of and in consequence of which there is a tendency to the recurrence of a tuberculous deposit in the lungs or other organs of the body.

Now you will remember the patient we had at the last clinic. Let us recapitulate the symptoms of his case, and see how they tally with what is usually found to be the symptomatology of phthisis in the first stage. At the last meeting I spoke of consumption before tubercular deposit had occurred. Now let us suppose that tubercles have formed. Already we find that their existence in the lungs will give rise to physical signs which are quite distinct, but often there are constitutional disturbances found before the tubercular matter is deposited, though of course we are likely to

have constitutional disturbance more marked if the tubercles have already formed.

The symptoms of the first stage of phthisis will be found to be as follows: Continued wasting. We can no longer say, as we said about the wasting in the pretubercular stage, that there is no local cause for it, for now a physical examination will reveal a local cause adequate to account for it. Then fever of a remittent type. Sometimes there will be two remissions and exacerbations daily, sometimes only one. You will find there is a persistently elevated temperature; the pulse constantly higher than is compatible with health.

There is to be noted in this connection that what constitutes an increase of the pulse in one person would not be so in another. You must remember that the frequency of the pulse in different individuals is as variable as the individuals themselves. It is an uncommon thing to meet with two persons having a pulse of the same character.

Among my patients I can select persons who have persistently, when in health, a pulse of over 100. There are individuals who have a nervous system so exceedingly sensitive and excitable that the heart, on very slight provocation, will be excited to a degree of activity that is far above what would exist in you or me under similar circumstances.

Then you will meet with others whose pulse is exceedingly slow. I have a patient who is certain to have fever when her pulse is 80, because, normally, she has a pulse of 60. So when you examine a patient you may find a pulse of only 80, and yet it may be that there is really persistent acceleration.

You may meet with a case of phthisis in which the constitutional disturbance is exceedingly slight, and yet physical signs will reveal that there is a tubercular deposit in one or both lungs.

There will almost certainly be digestive difficulties, and these are proportionate to the general disturbance of the system. When they are very marked it augurs ill, because they strike directly at the nutrition of the patient, and when this becomes very much impaired the wasting and loss of strength and vital power will be very great indeed.

In women there are menstrual disorders, and, unfortunately, at the same time, it does not seem to put a stop to their child-bearing capacity.

Often enough one of the early symptoms of phthisis in women is the cessation of the menses, and just so long as this amenorrhea continues it it augurs ill for the patient. When, in a phthisical patient, in whom there has been suppression for a long time, the menses return, it is a favorable sign.

These patients complain of dyspnœa and of pain in the chest. This pain is pleuritic in character and in origin. It is due to circumscribed pleurisy. They suffer from languor. There is no longer the capability for the same amount of physical or mental exertion they could once undergo, and then, after a while, they suffer from hemoptysis. This last named has been an early symptom in our patient.

Hemoptysis in the first stage is congestive in character, and therefore we find that the amount of hemoptysis indicates the degree of congestion, and the amount of congestion indicates the degree of irritation that the tubercular deposits have set up. For this reason frequently-recurring hemoptysis, as a rule, constitutes an unfavorable prognostic. These losses of blood are seriously detrimental to these persons whose blood-making powers are very poor, and who, besides this, are laboring under almost constant febrile disturbances, so that we may say the constructive processes are very much below par, and the destructive processes are much more active than they should be. Here you have the explanation of the loss of strength and flesh, which is steady and progressive.

A curious thing about these people also is that they can not be easily induced to eat fatty food. They do not like it in any shape or form. They are often averse to taking cream. The very things they ought to have they seem to have a decided antipathy for.

Cough is invariably present in phthisis, and probably signalizes the first deposit of tubercle in the lung, but this symptom is not continuous; as the lung becomes tolerant of this foreign material in its tissues the cough lessens or altogether ceases for a while. The cough of phthisis differs in character according to the stage of the disease, and is far from being always produced in the same way. In the first stage it is irritative, and often reflex; it is dry and hacking. It may be kept up by a morbid condition of the pharynx and upper part of the respiratory tract. It is only in the later stage that the cough becomes necessary to clear the air-passages of muco-purulent accumulations.

This constitutes about the symptomatology of the first stage.

What are the physical signs? They vary very much according to the quantity of tubercle deposited, the size, and aggregation into masses. They vary also according to the duration of the disease and according to the amount of local irritation; and you will have to distinguish at the bedside between the results of congestion and inflammatory trouble and the physical signs that are produced by the tubercles themselves. This is not very difficult to do. If the disease has lasted any length of time and there is a pretty extensive deposit, you will find there is flatness or sinking in of the affected side. When there are changes in the chest-walls generally you may conclude that the tubercular deposit is of considerable age.

With this flattening you discover there is a certain degree of immobility: you make the patient draw a long breath, and find that side does not

expand so readily as the other. You perform palpation, and find the vocal fremitus may be somewhat diminished or it may be increased. If the deposit of tubercular matter is slight, so as not to exclude a large amount of air, or if it is scattered throughout the lung, it may be increased. If there be a very large deposit, the vocal fremitus is decreased. But there is perhaps no positive rule to be laid down as to this. An increase or diminution in vocal fremitus is not of very great importance, becaue it varies so with the amount and manner in which the tubercular deposit exists.

There is more or less dulness on percussion, and certainly a considerable diminution in resonance.

On auscultation inspiration is harsh, expiration prolonged. There may be bronchial breathing. The expiratory sound is then longer; it is also elevated in pitch, and there is an appreciable pause between inspiration and expiration. Broncophony may also be present.

There is one physical sign that is of considerable importance, which for several reasons I have reserved for consideration until the last, and that is wavy inspiration. Instead of the inspiratory murmur being continuous it is interrupted two or three times in the course of one inspiration. This is produced by the solidification of the superficial layer of the lung and some thickening of the pleura generally, and it may be found in the first stage of the disease as well as in other conditions. It may be indicative of a slow course of the disease or it may not. It is often merely a transitory sign, and one which indicates that the tubercular deposit is going to undergo very speedy disintegration. Wherever it has been once and has disappeared, to be followed by other physical signs, such as mucous râles or moist râles, it never returns ; and whenever it makes its appearance right on the surface of the tubercular deposit you may make up your mind that that deposit is going to be very much enlarged in a very short time. It indicates that there has been a fresh deposit, made on the periphery of the old deposit and that it is about to undergo softening.

Now suppose you have a case of phthisis before you, and the patient says, What shall I do? Shall I go away from home? Shall I go to Florida or Colorado? What must be my course of life? I must arrange my business if you think I can prolong my life to any reasonable degree by closing it. Then comes the time when you must ask yourself, What are the unfavorable and what are the favorable indications in his case? Are there any signs that will enable you to say this case will be slow in its progress, or that it will be rapid and of short duration? I know of nothing more important, nothing that comes home to the physician more in his dealings with those patients than this very question of prognosis. If the patient come of tuberculous stock, I would inquire very particularly what form of consumption the other members of the family have suffered from. For instance, if the patient's father was attacked at the age of thirty-five with rapid consumption, and this patient happens to be about the same age, I should strongly incline to the view that his case would probably run a similar course. The personal resemblance also has something to do with strengthening that probability. If a man have a consumptive father and he resembles his father more than his mother, I would consider that an unfavorable prognostic. If a patient takes more after his mother, who is not tuberculous, he is more likely to inherit her peculiarities, and it is a favorable sign and should be so considered in summing up the facts for, and against him. If the disease sets in with a violent local irritation, it is a bad sign. If it sets in with great constitutional disturbance, high fever, copious night-sweats, and rapid loss of flesh, that is a bad sign. If he has had frequent attacks of hemoptysis I would regard that as unfavorable. I would consider also the extent of the deposit—how large an amount of lung-tissue is involved—and if a large amount be involved I would take an unfavorable view, so far as duration is concerned. Again, if you find the tuberculous deposit massed together, I would say that is against him. If the deposit were in the left instead of the right lung I would say that is unfavorable. If, on the contrary, phthisis occur in a person whose relatives suffer from a slow form of the disease, I would put that in his favor. If the disease has already lasted a good while and it is not causing very violent local irritation, that is certainly favorable. If you find it is not very extensive in the right lung and not in the apex, that is a favorable combination. In scrofulous people the deposit is more often in the base, and scrofulous tuberculosis runs a very slow course. If there has been very small loss of blood from the lung, that is favorable, although you will really find that persons suffering from phthisis are always relieved by the bleeding from the lungs. They don't feel so distended; they breathe much easier; and altogether they feel better after a moderate hemorrhage. It is really a spontaneous curative effort; but when the losses of blood are very profuse they become weakening, and are of course the result of excessive congestion.

Now these are points of prognosis which you can not afford to ignore, and you must take them into consideration in giving your advice. *Medical Herald, Louisville, Ky., U. S.*

THE TREATMENT OF VIOLENT DELIRIUM IN FEVER CASES.

Dr. J. W. Allan (*Lancet*): The management of violent delirium constitutes one of the most difficult tasks to those having the charge of fever cases. The following remarks are meant to apply

to typhus and enteric, and to severe attacks of delirium in these diseases.

Mild muttering delirium clearly does not call for active treatment; it is best met by such gentle measures as shaving the head, applying evaporating lotions to the scalp, sponging the skin with lukewarm water and vinegar, etc. Even that form of delirium, common in typhus, in which the patient insists on getting out of bed to go to his work, etc., may generally be controlled easily by a skillful nurse, who has only to use persuasion and gentle restraint to keep the patient in order. Sometimes such cases insist on sitting on a chair by the fire or going round the ward on a tour of inspection, and I have known an old and experienced nurse gratify these whims with the best possible result. The patient gladly returns to bed after the exertion, feeling tired in body but satisfied in mind, and frequently falls into a refreshing sleep. Of course such liberties could be accorded in certain cases only, and under the personal supervision of an old experienced nurse. The cases which are difficult of management are those in which the delirium assumes a wild or fierce character. The worst cases of all are those in which there is pulmonary complication. When a muscular young man is seized with a violent delirium at an early stage of illness, before his strength has been seriously impaired, great trouble is usually in store for those in charge. As a rule the patient is in a state of terror or apprehension. He thinks that he is in danger of being murdered, or he believes that he is about to be consigned to hell fire. He is simply desperate, and this constitutes the great danger of the case. Sometimes he is cunningly planning his escape. At this stage he must be closely watched. There is a peculiar look about the eye, not easily described, but once seen readily recognized again. There is also change of manner; questions are answered abruptly, or an obstinate silence is maintained. The man is in a dangerous state; a violent attack may occur at any moment. Every trivial action, every careless word of the attendants, has for him a sinister meaning. Without warning he may spring from the bed and dash through a window. The probability is that the patient has not slept for some time, and, recognizing his dangerous condition, the medical attendant is naturally anxious to administer a draught, so as to secure deep, refreshing slumber. But, to his great annoyance, the patient absolutely and doggedly refuses to swallow a drop, and for the very good reason that he believes an attempt is being made to poison him. This reminds one of the notions of the insane; and there can be no doubt that the delirious patient is temporarily insane. It may be that the attempts to get him to swallow the draught have roused the man to active resistance, and his violence may be so extreme as to necessitate the help of several persons and the application of mechanical restraint. The latter should never be resorted to when it can possible be avoided; but when it must be employed, let it be done quickly and effectively. Plenty of help should be obtained, for if the patient is strong, and one or two persons try to put him under restraint, the result may be a severe and prolonged struggle between the patient and attendants—an exasperating kind of exertion, which is bad for all concerned. The patient should be gently but firmly overpowered, when, as a rule, feeling helpless, he will submit. The "jacket" and "sheet" should then be employed, great care being taken to make sure that the long sleeves of the jacket are bound firmly round the patient's wrists, otherwise he will withdraw his hands and soon set himself free. When the jacket and sheet have been properly adjusted the patient is secure, but it is not desirable that he should be kept tied up a minute longer than it is necessary. If he still refuses to swallow the draught, what is to be done? A hypodermic injection of morphia might be given, but I confess to a prejudice against this practice in fevers cases, from a fear of causing local irritation, boils, etc., and, besides, the pain inflicted by the thrust of the needle, though slight, would confirm the patient in his belief that he was in the hands of the enemy.

I find the following method to work well: Morphia suppositories are administered till the patient becomes quiet and drowsy. He is then manageable. The jacket and sheet can be removed and warm, dry flannels, etc., put on. The probability is that he can now be got to take a draught, or at least to swallow passively. If he still refuses, morphia suppositories can be administered as required. As to the nature of the draught, I may state that I adhere to the hydrate of chloral, long ago tried and recommended by Dr. James B. Russel, in the treatment of fever cases. When there is simply insomnia, twenty or twenty-five grains of chloral hydrate in syrup (repeated, if necessary, in an hour), generally secures good sleep for an adult. When, however, there is violent delirium, the addition of five or ten minims of solution of muriate of morphia causes the end in view to be more rapidly and effectually attained. But this combination of chloral and morphia is well known to be a formidable one; it requires to be carefully administered, and the effects must be closely watched. When the narcotics require to be given for a long time on account of persistent delirium, it is convenient to prescribe a mixture, each dose of which contains ten grains of chloral and five or ten minims of solution of muriate morphia, the interval between the doses being determined by the effect produced. Respiratory embarrassments, lividity of nails, etc., are serious contra-indications to the use of narcotics. When suppositories and draughts have both been given in a case, this should be well borne in mind so as to estimate the combined effect. In the treatment of violent delirium in fever, narcotics wisely given may save life; improperly given, they may hasten, or even directly cause, death. In prescribing them, no routine practice can be adopted, and their admin-

istration demands the most careful personal supervision of the physician in attendance.

THE THERAPEUTICS OF DIPHTHERIA.

BY DIFFERENT AUTHORITIES.

ALFRED STILLE,—*Local.*—Ice in mouth and on neck first stages. Alum or tannin by insufflation; muriatic acid by a brush; potassium chlorate; tincture iodine; lactic acid is a good solvent of the membrane; carbolic acid; potassium permanganate. *General* treatment is the indication, as the membrane will return till the cause is removed. Emetics may be advantageous in the early stage. "Supporting of nature is the only way to treat;" nature will eliminate the poison; in grave forms, stimulate; alcohol and stimulant doses of quinia; tincture of chloride of iron is absorbed, constringes the blood-vessels, and previous exudation; food is the greatest of all indications; opium diminishes waste and nervousness; it also aids in the appropriation of other stimulants; alcohol can be borne in large doses; fluid beef, milk, farinacea; Huxham's tincture. In cases of medium intensity, give tonics rather than stimulants. Tracheotomy is fatal in about three-fourths of the cases. It is advisable under favorable circumstances.

J. SOLIS COHEN.—The two main indications consist: 1. In keeping up a supply of nourishment and stimulants, and 2. In providing for the detachment and discharge of the morbid accumulations when they threaten to occlude the air passages. The sick room must be systematically disinfected. This is done by the free use of sprays of carbolic or sulphuric acid. Solutions of the sulphate of iron or some other disinfectant are kept in all the vessels which are brought into the sick room to receive the discharges, the soiled clothing, refuse food, and slops of the patient.

He regards the chlorine compounds as of more efficacy in diphtheria than all other remedies. Of these he prefers the tincture of the chloride of iron which must be administered at frequent intervals and in large doses—from five to thirty drops, according to age and vigor of patient, should be given from every half-hour to every second hour as the case may be. It is given in glycerine and water, or in diluted syrup of lemon. Dr. Cohen prescribes chlorate of potassium very frequently in this disease—in the form of *chlorine* mixture (made of an equal number of grains of the chlorate and of drops of hydro-chloric acid, in plain or aromatic water, or in the infusion of quassia). He always suspends the use of this remedy when there are any symptoms of renal irritation produced by it.

He administers the hydrochlorate of quinia (in preference to the sulphate) as a tonic, antipyretic, neurotic, and antiseptic. It is to be given in decided doses. When deglutition is painful it is given by enema, with proper augmentation of the dose.

Alcohol, in the form of strong wine, or as brandy or rum, is regarded as of the utmost importance when the system begins to give way. It should be given after the earliest manifestations of decided loss of vigor. At this stage it is of more importance for the time being than any remedial agent. From f ℥ ss. to f ℥ j. of brandy are to be given at intervals of from fifteen minutes up to three hours. As long as it is well borne it may be given to any extent short of intoxication. Children readily take a sort of syrup of brandy made by burning it beneath a lump of sugar, which becomes melted in the process. At moments of sinking he regards carbonate of ammonium as valuable. He gives from two to ten grains by the mouth, in syrup of acacia, or from eight to forty grains by the rectum. At moments of collapse the ammonia is given by intravenous injection.

The sore throat is treated by pellets of ice placed in the mouth and renewed more or less cautiously The use of ice-compressors is not approved. It is thought better to apply warm cotton batting, spongio-pilin, or an actual cataplasm, or to anoint the neck with oil, lard, or cosmoline, care being taken not to abrade the cuticle lest local infection arise as a complication. Morphia is administered when great pain arises.

Morbid products in the pharynx and nasal passages undergoing detachment should be promptly removed. This morbid product is kept diffluent as much as possible by maintaining an excess of humidity in the atmosphere of the room by keeping a steaming vessel of water on the stove. The uninvaded tissues should never be cauterized. Applications of the tincture of the chloride of iron should be made to the pseudo-membrane with a swab of cotton or sponge. After this application the attempt may be made to remove the deposit by gargle, spray douche, or syringe; employing lime-water as the medium. Forcible removal of the deposit is not regarded as judicious.

When the larynx is invaded Dr. Cohen keeps a constant stream of steam in motion directed over the patient's face. Whenever the respiration becomes obstructed, a few pieces of lime about the size of the fist are slacked by the bedside every hour or so, covering the vessel in which they are slacked with a hood of stiff paper, so as to direct the steam and particles of lime toward the mouth of the patient.

The use of emetics is indicated in children to provoke expectoration from the air-passages in the act of vomiting; but the same indication does not occur in adults who are able to expectorate voluntarily. If successful, the emetic may be repeated at intervals of six hours, as long as the indications continue to recur. Alum, ipecac, and turpeth mineral are the most reliable agents, and may be tried in the order named; adhering to the alum if it prove efficient. Emesis should not be carried too far, or be repeated if ineffectual, as it exhausts the power of the system without any compensation in the discharge of morbid products.

Should asphyxia be threatened from accumulations in the larynx or trachea, tracheotomy is indicated, and, though most frequently unsuccessful in averting death, it facilitates due access of atmospheric air to the lungs, and often saves lives that would otherwise be lost. The most careful attention is required after tracheotomy to keep the artificial passage clear. The stimulating treatment and the lime inhalations should not be discontinued The two main indications for favorable prognosis after tracheotomy are desire for food and ability to expectorate. All treatment should be subservient to facilitating these great ends.

Bartholow believes that there are two objects to be kept in view in the treatment of diphtheria: 1. To modify the course and shorten the duration of the disease; 2. To obviate the tendency to death.

First head.—The application of topical agents to the fauces and the adminiztration of internal remedies according to sympioms.

He entirely disapproves of caustic and acid applications as inviting the disease to the adjacent portions of the mucous membrane by destroying the epithelium. He does not think much of the value of benzoate of sodium. The application of sulphur, in the form of powder, by insufflation or by blowing it over the whole diseased surface as far as it can be reached, he believes to be good treatment. He regards lime-water and lactic acid as of value as solvents. Some pieces of freshly burned lime are put in water, and the patient directed to breathe the vapor as it rises, or a solution of lactic acid strong enough to taste distinctly sour is freely applied to the throat by a large mop. He places no value in the use of chloride of potassium or tincture of the chloride of iron as faucial remedies. When gangrenous sloughs are thrown off from the throat, carbolic acid is indicated, a one per cent. solution—not stronger than one per cent. This solution may be applied either by mop or syringe. When the exudation extends into the nares the spray of a one per cent. solution of carbolic acid is gently thrown into them and kept up until the two canals are pervious, thus preventing the extension and decomposition of morbific materials and the consequent swelling of the deep cervical glands and possible development of septicæmia. In is only when the exudation extends into the nares that much good can be accomplished by topical applications—so thinks Dr. Bartholow.

Second head.—The prevention of the diffusion of the morbific agent, of the development of septicæmia and of failure of the heart.—With the earliest appearance of an exudation in the fauces, from two to ten grains of the bromide of ammonium are given every three hours. It is believed that the diffusion of this agent through the mucous membrane of the respiratory organs, and so out of the mouth, detaches the exudation. To prevent septic decomposition he advises the use of a drop or two of Lugol's solution in water every hour or two. This drug is to be given when the exudation is fully developed and spreading. He uses alcohol steadily, pushing it in large doses as an antiseptic agent. Quinia is also considered valuable in this same connection. Dr. Bartholow does not believe in the extraordinary powers of chlorate of potassium in this disease, as claimed by many. He fears its injurious effects on the kidneys.

As food, milk, egg-nog and beef-tea are given freely about every three hours.

Abraham Jacobi sums up the treatment as follows: Every case should be treated on general principles with symptomatics, roborants, stimulants, febrifuges, externally, internally, or hypodermically.

The uncertainty of the termination and the frequency of collapse, or sepsis, prohibit procrastination. Waiting long means often waiting too long. Alcohol is a very important adjuvant and remedy.

The dose must often be apparently large, from two to twelve ounces daily, according to the circumstances.

Depletion is absolutely contra-indicated. Debilitating complications, such as diarrhœa, must be stopped instantly. Stomatitis, chronic pharyngitis, hypertrophy of the tonsils, glandular enlargements, must be relieved or removed preventively. Acute catarrh of the mouth and pharynx requires the use of potassium or sodium chlorate, in doses not exceeding a scruple daily for a child of a year, one to two drachms for an adult. The single doses must be small and very frequent—every hour, half, or quarter hour. Large doses are dangerous, result often in nephritis, and have proved fatal.

The main indication in local diphtheria is local disinfection. To disinfect the blood effectively we have no means. Salicylic acid changes into a salicylate which is no longer a disinfectant. The amounts of disinfectants required to destroy bacteria are so great that the living body could not endure them. But the discipline of the house, school, and social intercourse can be so modified as to prevent the spreading of an epidemic. The inhalation of steam is very useful in catarrh of the respiratory organs, and also in inflammatory and diphtheritic affections. In fibrinous and tracheobronchitis it has proved quite successful. But it may also prove dangerous by excluding oxygen and overheating the room or tent. Drinking large quantities of water, with or without stimulants, also excites action of the muciparous glands and aids in macerating membranes. The internal use of ice, and its local applications to the affected parts can be very useful. But the cases must be selected for each and any of the remedial agents and applications. The use of baths and the cold and hot pack is controlled by general indications. The usefulness of lime and water lactic acid has been greatly overestimated. Glycerine is a valuable adjuvant, both internally and externally, but nothing more. Turpentine inhalations are deserving of further trials, though they are more effective

in purely inflammatory than in diphtheric processes. Inhalations of chloride of ammonium act favorably in catarrhal and inflammatory conditions, and deserve a trial for the purpose of aiding maceration of membranes. Mercurials are contra-indicated in the septic and gangrenous forms of diphtheria, but in those which assume the purely inflammatory character, with less constitutional debility and collapse, as in sporadic croup or in fibrinous tracheo-bronchitis, some reliable clinicians claim good results. Astringents, such as alum, do not work favorably. Chloride of iron is among the most reliable of antiseptic and astringent agents. Small doses at long intervals are quite useless. Moderate doses frequently repeated have a satisfactory general and local effect. A child of a year must take at least a drachm daily ; a child of three or four years, from two to three drachms. The same or larger doses for an adult, The chloride is to be mixed with water and glycerine in various proportions, so that a dose is taken every hour, every half-hour, every ten minutes. Thus the local applications to the throat become almost superfluous. Potassium or sodium chlorate, half a drachm daily may be added with advantage. Carbolic acid is useful both in local and internal administrations, according to the end to be reached, it may be used either in concentrated form or in a one per cent. solution internally, in doses of a few grains to half a drachm daily, salicylic acid acts as a caustic when concentrated ; in moderate solutions it destroys fetor ; salicylates are anti-febrile only. The anti-febrile effects of quinia are not so favorable in infectious as in inflammatory fevers ; its antiseptic action is not satisfactory in practice. Deliquescent caustics are dangerous. Injury of the healthy mucous membrane must be avoided. Mineral acids, and particularly carbolic acid, when their application can be limited to the desired locality,are preferable, Bromide, both internally and externally, is warmly recommended by Wm. H. Thompson. Boric acid, in concentrated and milder solutions, has been recommended as a local application to membranous deposits generally, and to the diphtheritic conjunctiva in particular. Membranes must not be torn off, and not removed unless they are nearly detached. Caustics are contra-indicated, except where their application can be limited to the diseased surface. No healthy part must be torn. Swelled lymph glands require ice, iodine, iodoform mercury, poultices, incision, carbolic acid, according to circumstances, and at all events frequent and careful disinfection of the mucous membrane from which their irritation originates. Diphtheria of the nose is apt to be fatal unless careful treatment is commenced at once. It consists of persistent disinfection of the nares and pharynx by injections. The tendency to sepsis forbids a long intermission of them. They must be continued day and night, for one to several days, no matter whether the glandular swelling be considerable or not. Laryngeal diphtheria proves fatal in almost every case, unless tracheotomy be performed. It is less successful the more the epidemic or case bears a septic character. Emetics are useful for the removal of the half-detached membranes. Diphtheritic paralysis requires good and careful feeding—iron, strychnia, the faradic or galvanic current, friction, hot bathing. Urgenf cases indicate the hypodermic administration o strychnia. Diphtheritic conjunctivitis is benefited by ice and boracic acid ; cutaneous diphtheria by local cauterization and disinfection, besides general treatment.

C. E. Billington recommends the following prescriptions : *No* 1.—*Iron and Glycerine Mixture.* ℞. Tinct. ferri chloridi, f ʒ j.; glycerinæ, aquæ, aa f ℥ j. M. Sig. A teaspoonful of this and of No. 2, alternately, every half-hour through the day. *No.* 2.—*Chlorate of Potassium Mixture.* R. Potassi chlorate, ʒ ss. ; glycerinæ. f ℥ ss. ; aquæ calcis f ℥ ijss. M. Sig. A teaspoonful of this and of No. 1, alternately, every half-hour through the day. *No.* 3.—*Spray Mixture.* ℞. Acid. carbol., mxv. ; aquæ calcis, f ℥ vj M. Sig. To be used with a small hand atomizer. The patient is allowed to sleep for an hour or two at a time at night. When awake, doses of Nos. 1 and 2 are alternated every half-hour. The throat is sprayed with No. 3 for several minutes at a time, whenever Nos. 1 and 2 are given. In spraying, the mouth is opened widely.

Where there is nasal implications the nose is thoroughly syringed out with warm or tepid salt water, once, twice, or three times a day. This syringing is done with the patient's head inclined forward ; a two-ounce hard-rubber ear syringe is used.

Dr. Billington never applies any brush or swab to the throat. He sometimes throws a drachm of No. 1, with a syringe, directly against the affected surface in the throat. He does not give quinia or any other unpleasant medicine to children. He does not give alcoholic stimulants except where a child, who cannot be induced to take other nourishment, will take weak milk-punch or egg-nog.

The patient is nourished with an abundance of cold milk, given frequently, to which a little lime-water is often advantageously added. When the stage of extreme exhaustion has been reached in bad cases the juice squeezed from beefsteak is given.

THE ADMINISTRATION OF QUININE.

In the *London Practitioner*, Dr. David Young enunciates the following :

1. Never to give quinine in antipyretic doses in cases where the bowels are confined and the secretion of urine is scanty.

2. In cases where it is being administered, and an increase of dose is desirable, this may be safely done if the skin, bowels, and kidneys maintain their normal functional activity.

3. In many cases of remittent and intermittent fevers, the combination of the drug with chloride of ammonium or a salt of potash or soda is likely to be more easily tolerated, as well as more useful, than if it be administered in a pure form.

4. During the administration of quinine, should a headache come on or increase in intensity, the case requires the most careful attention.

NERVOUS DYSPEPSIA.

In persons of a nervous temperament, especially excitable women, we will frequently meet with a form of dyspepsia, not amenable to ordinary treatment. We recently had a case, in a woman, caused evidently by mental worry, in which there was great depression of spirits, a globus hystericus and a great oppression, with constant and violent eructations of wind, always greatly aggravated by eating. Antacids, pepsin, and a host of routine remedies, were useless; she was then ordered tincture of valerian and bromide of potash in small doses (ten drops of the former and two grains of the latter) every hour. The dyspepsia and nervous irritability commenced to yield after the second dose, and soon disappeared.

THE POISON OF RHEUMATIC FEVER.

Quite a lengthy article on this subject by Dr. David Thompson thus concludes in the *Lancet*, December 29, 1883:

"I am inclined to conclude that the poison of rheumatic fever is derived from without; that, though it arises under circumstances incompatible with the belief that it can be of malarious origin, as usually understood, yet it is not improbable that it may be a terrestrial aeriform emanation. And we have ample reason to show that, whatever be the nature of the poison, salicine and its compounds exercise such a beneficial action over it as to entitle them to be called specifics. Nor is the method employed by some, of giving it with a half belief in its efficacy, in small doses, of any utility; indeed, it is worse than not using it at all, for while it affords no relief to the sufferer, it at the same times brings discredit upon a remedy of great value."

A CAUTION ABOUT BELLADONNA PLASTERS.

One would hardly suppose that serious results could ensue from the application of a belladonna plaster, yet Dr. Martin J. Fleming reports a case of well-marked belladonna poisoning, relieved by opium treatment, in the *Medical Record*, January 19, 1884, caused by the application of a plaster to a back that had been somewhat denuded by the use of an irritating liniment. The case suggests the advisability of cautioning patients against applying such plasters over an abraded skin surface.

A NEW HAIR-DYE.

The disadvantages attending the use of hair-dyes containing lead, and the positive danger attending their use, have induced M. Naquet to search for a liquid which may be used for dyeing the hair and yet be innocuous. He describes, in the *Moniteur Scientifique* a dye which is said to have a progressive action, to produce all shades up to a deep chestnut-color, and yet to be free from all deleterious action. The base of the dye is bismuth. The following is the formula. Bismuth is dissolved in the smallest possible quantity of nitric acid—nearly three parts—and to this liquor a solution in water of tartaric acid, equal in weight to one-fourth of the bismuth used, is added, and then a large quantity of water, so as to insure thorough precipitation of the bismuth. The precipitate is filtered off, and washed with water until the washings have lost all acidity. The precipitate is dissolved in a solution of ammonia; and for this rather more than a fluid ounce of solution of ammonia will be required for each ounce of bismuth used. Hyposulphite of soda—three fourths of the weight of the bismuth employed—is then added, and, when the salt is dissolved, the mixture is filtered, and preserved in well-closed bottles. The dye should contain about one twentieth of its weight of bismuth, Such a mixture is said to form an admirable dye, which loses ammonia on exposure to air, and deposits sulphide of bismuth.—*British Medical Journal.*

THE ABSORPTIVE POWER OF THE SKIN.

Since drugs are frequently used by inunction, it will be interesting to read that from experiments made with salicylic acid, salicylate of sodium, and tincture of iodine, applied to the skin as simple solutions or in the form of spray and with mercurial ointment, Dr. Ritten (*Deutsch. Archiv. fur Klin. Med.*, p. 143, vol. xxxiv.) comes to the conclusion that the normal skin has not the power of absorbing these substances, either in a fluid condition or in the form of ointment or of spray, but that all substances which irritate the skin may produce, when sufficiently vigorously applied, a solution of continuity, and may then be absorbed from the altered skin.

INJECTIONS OF ETHER FOR SEBACEOUS CYSTS

Make the tumor tense by pressure and inject by a Pravaz syringe 5–10 drops of ether into the largest aperture noticed. Repeat every second day until inflammation is set up. Then puncture the base of the tumor, when pus will escape, followed by broken-down sebaceous matter, and the tumor is cured. This is the treatment recommended by M. Vidal in *Bull. Gen. de Therap.* November 30, 1883.

A NEW USE FOR APOMORPHIA.

This valuable emetic has proved serviceable in two cases of hystero-epilepsy reported by Dr. T. Hammond Williams in the *Med. Times and Gaz.*, December 8, 1883. In the one case the attacks were probably due to suppression of menses, in the other their etiology was obscure. In both, however, they diminished in intensity and ultimately disappeared under the hypodermic use of apomorphia in doses of one-fifteenth of a grain.

THE CANADA MEDICAL RECORD.

A Monthly Journal of Medicine and Surgery.

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All communications and Exchanges must be addressed to the Editors, Drawer 356, Post Office, Montreal.

MONTREAL, MARCH, 1884.

THE ANATOMICAL ACT.

The Montreal *Herald*, since it has passed under new management, has shown a large increase of vitality, and much of its editorial work exhibits sound judgement and much practical good sense. We regret, however, to notice that on the subject of the present Anatomical Act it has, as a Scotchman would say, run wud—that is, mad. Several times during the winter it has had small editorials denouncing the Act in severe terms; but a short time ago it came out with a series of articles in the same issue in which the Act was depicted in a light more horrible than true, and calling on the Legislature to repeal it without delay. Now we desire to make an attempt to place our *confrere* right, or at least understand the position of matters. As the editor-in-chief of the *Herald* has only become but recently a resident of our City, and comes from a section of the Dominion where medical students and their wants are unknown, it is just possible that he does not fully comprehend the situation. First, we may say, that the day has gone past when it is necessary to argue the necessity for medical men having material upon which to learn the anatomy of the human body. That is now an admitted fact. Such being the case, the only question that remains is how this material is to be obtained. In many countries where medical education is given, provision is now made whereby the bodies of persons dying in institutions receiving Government aid shall be handed over to the medical schools, unless claimed by relatives, the rule being not beyond a third cousin. This law has been found to work well as a rule in all large centres, and ample material has been forthcoming. In our own Province of Quebec such a law has been for a number of years on our Statute book, but it was, strange to say, practically a dead letter. There was no penal clause by which the Act could be enforced, so that, so far as we know, only one institution obeyed. What was the result? Simply this, that graveyards were desecrated, vaults were broken open, and scarcely a week passed that the newspapers did not chronicle the terrible doings of the grave desecraters. The feelings of the public were aroused, and those who had relatives die, watched their graves; still, in spite of all—in spite of men being sometimes arrested in the very act or from information obtained—body-snatching went on. The medical schools, generally speaking, received a good supply of material, but it was at the expense of the feelings of many, who discovered, perhaps when too late for recognition, that the graves of those they loved had been desecrated. So long as demand existed, in spite of all that was done to prevent it, the supply was obtained year after year. All that was required to make body-snatching a thing of the past was to grant a legitimate supply, and attach to the reception of a stolen body a heavy penalty. To accomplish this the Quebec Act, already in existence for many years, required only the attachment of a clause, by which a penalty could be enforced against any institution in the Province refusing to give up unclaimed bodies, and to heavily fine any college using bodies not coming to them as the result of the operation of the Act. These clauses were attached, and the result has been that during the entire winter not a grave has been disturbed. We believe we are equally correct in saying that the Act has been enforced without the feelings of a single individual, distant relative or friend, having been hurt. Coming, as bodies have, from various portions of the Province, a sufficient number and more has been obtained of those absolutely without frinds of any kind—so that when a person died who legitimately came within the provisions of the

Act, and yet had friends or distant relatives who claimed the body, no difficulty was put in the way of their obtaining it. Such being the history of the working of the Act, we fail to see with what reason our friend, the editor of the *Herald*, should try and arouse public sentiment against it. He simply writes sentimentally; he offers no method that is bet ter. If the public desire good surgeons and physicians these men must learn their anatomy. This can only be done by dissection of the human body. Shall these bodies be obtained legitimately or illegitimately? —that, practically, is the only question. So far as the medical schools are concerned it matters little, only so far indeed as those connected with them desire, as we know they do, that, when a body is deposited in the grave by friends, it should be allowed to remain there. If the public, forgetting this most important fact, should so influence legislation as to withdraw the present Act, what would be the result? The supply would not be cut off. Body-snatching would once more be of constant occurrence, and a sense of insecurity would pervade all classes, with regard to the possible disposition of the bodies of their friends. The necessity of human dissection is recognized. We believe that in this Province we have provided for its being done with the minimum amount of outrage to the better feelings of our nature.

INCREASE OF YELLOW FEVER AT PANAMA.

Further private advices from Dr. Wolfred Nelson of Panama report ten cases of yellow fever in December, 1883, with six deaths. The S.S. *Lima*, of the Pacific Steam Navigation Company cleared from Panama in that month for Callao, Peru. A few days out from Panama, yellow fever appeared on board. A number of her passengers had been waiting for her for nearly ten days in Panama. Ere the steamer reached Callao (eight days from Panama) one died, and several sickened. At Callao she was quarantined. Cases were isolated on board; two more died. Later on no new cases appeared, she was admitted to pratique. Her passengers doubtless received the germs of this disease in Panama. Fourteen fatal cases were reported in Panama in January of this year. Three fatal cases were reported on the line of the Panama Railroad for that month as well. Up to the date of his letter, February 11th, nine cases and six deaths were reported. As usual the cases were among new-comers. Such is our information. In closing he tritely observes: "This is supposed to be the healthiest season of the year and so it is, it being the dry season. If things go on from bad to worse, while things 'are healthy,' as the increasing death-rate proves, what the change of season in April and May—from dry to wet—has in store for us is not pleasant to contemplate. Our forecast in October last of a possible epidemic in 1884 is now assuming tangiable shape. Colon, on the Atlantic, is filthy and overcrowded, Panama, on the Pacific, is the same. Filth unmentionable is thrown into the streets in both cities. There is an abundance of suitable material for the disease to feed on in the hundreds of new-comers and unacclimated people. The disease has been endemic for years, as I shall fully prove in the near future.

THE POPULAR SCIENCE MONTHLY FOR APRIL, 1884.

This is an especially strong, varied, and valuable number. The opening paper is by Herbert Spencer on a subject of great public moment—the decay of the sentiment of personal liberty, and the rapid growth of the system of legislative interference and coercion—which he discusses under the title "The Coming Slavery." Our politicians should give attention to the striking facts and startling conclusions of this masterly paper. "A Defense of Modern Thought," by W. D. La Sueur is a vigorous reply to the Bishop of Ontario on "Agnosticism," and an instructive statement of the position of modern thinkers. There is another most excellent and practical chapter of W. Mattieu Williams's "Chemistry of Cookery," in which butter and other fats and milk are treated; and Dr. Oswald concludes in this number his lively series on "The Remedies of Nature." The illustrated articles are, "Photographing a Streak of Lightning," by Gaston Tissandier; "Why the Eyes of Animals Shine in the Dark," by Swan M. Burnett, M.D.; and "The Electric Railway," by Lieutenant B. A. Fiske, U. S. N., in which is told just what every one wants to know about this coming mode of transportation.

New York: D. Appleton & Company. Fifty cents per number, $5 per year.

THE U. S. PHARMACOPIA.

Any person having purchased a copy of the U. S. Pharmacopœia of 1880 and desiring a list of the corrections since made therein, can procure the same by sending a two cent stamp to Wm. Wood & Co., Publishers, 56 and 58 Lafayette Place, New York.

REVIEWS.

HEALTH AND HOME: A Journal of Sanitary Science and Home Hygiene.

We have received the first numbers of this new Journal, edited by F. N. Boxer, Civil and Sanitary Engineer. It is the official organ of the Canadian Sanitary Association, and presents a very neat appearance. This new journal has a wide field into which it may extend its usefulness, for sanitary matters are little understood, and still less appreciated by the mass of our population. Its Editor has an excellent record as a member of the Montreal Board of Health, and is well qualified for the position he occupies.

PERSONAL.

Dr. Wm. Young (C.M., M.D. Bishop's College 1878) has resigned the chair of Chemistry in the Medical Faculty of Bishop's College, and leaves early in April for Hong Kong, China. Dr. Young after his graduation went to Hong Kong, where he entered into practice with his brother, a prominent practitioner of that city. He remained there till the winter of 1883, when ill health caused him to return to Canada. His many friends induced him to remain here, and his old teachers offered him the chair of Chemistry in his *Alma Mater*, which he accepted. He was rapidly getting into an excellent practice, and his success as a teacher was very marked. In the meantime his brother desired to retire from practice, and offered him the opportunity of becoming his successor. The practice being one of the largest in Hong Kong, the opportunity was too tempting to be refused, and Dr. Young decided to accept it. All who have had the pleasure of Dr. Young's acquaintance, will regret his departure, not only for his warm and genial character, but because they believe that, before very long, he would have come to the front, and become one of Montreal's leading Medical men. We believe, however, that if his health is spared for a few years it is his intention to again return here. His Class of Chemistry at the close of the course presented him with an illuminated address, and the Medical Faculty of Bishop's College, entertained him at a dinner given at the St. Lawrence Hall. We extend our heartiest good wishes for Dr. Young's success.

Dr. Osler, Registrar of McGill College, Faculty of Medicine, accompanied by Dr. Gerald Howard, Assistant Demonstrator of Anatomy in McGill College, started from New York in the *Fulda* for Antwerp on Wednesday, the 25th inst. They intend spending some time in Germany.

Mr. H. R. Gray, the well-known chemist of Montreal, was, at the late Municipal elections, elected an alderman for St. Lawrence Ward by a very large majority. We believe Mr. Gray is a decided acquisition to the City Council, and we congratulate him on this mark of the esteem in which he is held.

Dr. Henry Howard, of Montreal, Inspector of the Longue Pointe Lunatic Asylum, has had a well-deserved compliment paid him. He has been asked to contribute a paper and act as referee on the subject "The Influence of Forestry on Climate and Health" at the meeting of the American Forestry Congress, which meets at Washington in May.

CORRESPONDENCE.

To the Editors of the CANADA MEDICAL RECORD.

SIRS,—Will you please be good enough to mention in your Medical journal the following:—The College P. & S. P. Q. has had judgment in its favor, at the last term of the Circuit Court, in Portage du Fort against Jas. D. Stewart, of Belleville, Ont., for illegal practice of medicine in the Province of Quebec. An unlicensed midwife by the name of Adeline Rivet, wife of A. Lafortune, of l'Assomption, has paid a fine, without costs, before the taking of the action against her, and promised to retire from practice. Thomas Ward, charlatan, of Notre Dame du Richelieu, has paid a fine, without costs, before the taking of the second action against him, and will be prosecuted again if he continues to practice. An action has been taken for the second time, on the 18th February last, against a charlatan of the name of Frs. X. Destrempes, of St. Cuthbert. The case will go on between the 10th to 15th April next, at Joliette.

I remain, yours respectfully,

C. E. de LAMIRANDE,
Detective Officer.

March 3rd, 1884.

THE CANADA MEDICAL RECORD.

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ADDRESS TO THE GRADUATES IN MEDICINE OF THE UNIVERSITY OF BISHOP'S COLLEGE, DELIVERED AT THE ANNUAL CONVOCATION, APRIL 3RD, 1884.

By T. SIMPSON, M.D., Professor of Hygiene.

MR. CHANCELLOR,—Gentlemen Graduates,—It devolves on me, in the observance of a time-honored custom to address to you on this the occasion of our last meeting together as pupils and teachers a few words of congratulation and advice.

After years of toil, and no trifling amount of self-denial on the part of some of you, you have reached the goal for which you have striven, have received the highest honor in the gift of this University, and carry with you to-day its stamped certificate of proficiency.

I can well understand and appreciate the satisfaction and sense of relief with which you regard the termination to your pupilage, and the natural and proper confidence with which you look forward to a successful career—a confidence the fruition of which depends in a great measure upon your own tact and industry.

To-day you open a new book of record; the knowledge which you have obtained during your attendance upon lectures and in hospital wards fits you for the independent study and observation of disease and the various forms of injury to which the human body—yes, and mind—are subject.

Your studentship, it may be said, has but fairly begun, and if you desire to keep abreast of the times and perform the work which you are about to undertake faithfully and conscientiously, students, and hard students, you must remain to the end.

Multitudes of crude theories are being sprung upon you, so to speak, from every quarter, with here and there a grain of valuable knowledge or practical suggestion, but, in order to winnow the grain from the chaff, constant vigilance and no trifling amount of labor are necessary.

The ingenuousness and enthusiasm of youth are apt to be imposed upon by the specious arguments of the visionary, and I conceive it to be my duty, armed by the gravity of this occasion, to caution you against the pit-falls of superficial reasoning and the false deductions of imperfect and hasty experiment. I speak of the honest theorist—this is no place to discuss the ways of the charlatan.

Perhaps in no other profession than the medical is the old advice to "hasten slowly" so applicable; do not misunderstand me, however, there must be nothing even approaching to indifference to progress, or lukewarmness. What I wish to inculcate is the necessity of cultivating a careful habit of discrimination and of calm examination, before pinning your faith to the plausible theories of even so-called authorities.

The art of medicine, owing to its present imperfections, furnishes an ever-varying and boundless field for the exercise of our faculties, and one of the chief safeguards against stagnation, lies in the fact that the deep interest, constant novelty, and unbounded capacity for good, which belong to the study and practice of medicine, have enlisted many of the ablest intellects of the past and present to devote themselves to the task of unravelling the

mysteries of disease, and to the discovery of means for its cure, amelioration or prevention.

Perhaps I cannot more profitably occupy the time at my disposal than by re-directing your attention, in as few words as possible, to some of the discoveries made within a comparatively recent period.

In the domain of medicine proper great advances have been made: a more accurate knowledge of the causes of disease, through the labors of the physiologist and pathologist, the introduction of new remedies and skilled nursing, greater attention to general hygiene, and a more intimate acquaintance with and greater reliance on the power of nature to heal and right herself, have revolutionized the practice of medicine and established it upon a more rational and satisfying basis.

Our time will not permit me to do more than barely mention a very few of the many triumphs of modern surgery. Sir James Paget, in a recent popular article on vivisection, incidentally alludes to an aneurism of the lower limb which was fatal in 95 out of a hundred cases before Hunter's time; now the mortality is reduced to less than ten per cent., so that Hunter was the means of saving innumerable lives by his discovery.

Of late years the introduction of anesthetics, of the bloodless method of Esmarch, and of the antiseptic treatment of Lister, with its various modifications, all having the same end in view, has shorn surgical operations of the greater part of the terror with which they used to be contemplated, whilst the mortality as compared with 30 years ago has been reduced by more than forty per cent., and this notwithstanding that operations are now daily and successfully performed which, by their magnitude and the importance of the organs involved, would have appalled the boldest surgeon of the last generation.

Spencer Wells has added hundreds of years to the lives of women by his own skill and dexterity What has he effected by his example and teaching? And, although he perhaps takes the lead in his chosen specialty, scores are engaged in the same character of work, and many of them with a measure of success equal to his own.

And, lastly, that department of medicine which I have the honor and privilege to teach in this place has not lagged behind in the general advance; preventive medicine continues to hold its own. At the same time I would beg of this intelligent audience by no means to gauge its importance by the manner in which its teachings and warnings are ignored, or even contemptuously treated by—well let us say some communities. It requires the possession of considerable intelligence and foresight to enable one to estimate fully the value of prevention. The man who has just recovered from a severe attack of a contagious disease will sometimes feel grateful for the skill and attention which have carried him through, whilst if he had been advised to have his house drains pulled to pieces, remodeled and repaired, and told that such action was positively necessary in order to preserve the health of the inmates of his dwelling, in many instances the man would regard his adviser as a weak and meddlesome alarmist. And as with the individual so with communities: a vast amount of infectious and contagious disease which devastates cities is preventible, and yet it is allowed to visit them periodically and claim its thousands of victims, although the method of preventing these visitations of fell disease and death is as apparent and common-sense as can well be. One would think that, from a purely commercial point of view, if from no other, prevention in the cases referred to would be better than cure.

Preventive medicine rests upon an accurate knowledge of the causes of disease, and the investigation of these causes by a few laborious enquirers has, within a few years, led to the most astounding results. Let me remind you of one example: It appears to have been demonstrated that, by a process of artificial cultivation, the microscopic carriers of the virulent poison of anthrax and some other kindred diseases, may be converted not only into harmless atoms but, when used at a certain stage by innoculation, may serve as a preventive to the invasion of these diseases or most favorably modify their action; and, still yet more extraordinary, that, by what may be termed a retrograde process of cultivation, the most innocent microphyte may be so altered in character as to become an agent for the carriage of virulent infection.

Believing, as I do, in the surpassing importance of preventive medicine, I feel a just pride in being able to say to-day that Bishop's School was the first in the Dominion—if not on this continent—to make hygiene a separate compulsory and branch of study in its medical curriculum.

Gentlemen, I am not here to-day either to vindicate our profession or to boast of its achievements. I have a very different end in view in rapidly

sketching a faint, and necessarily imperfect, outline of some of the fruitful labors of recent workers, and of the glorious record of our art. I am desirous of strengthening within you that spirit of laudable and rational enthusiasm for your profession which I am sure you all possess, by indicating by inference, the vast field which now stretches before you for the exercise of your faculties of observation and research. We have as yet but crossed the confines of a very partially explored region, but we have seen sufficient of its riches to stimulate us to exertion and to encourage us to hope that, by patient industry and endeavor, you may be able in your day and generation to add to the general stock of knowledge, and aid in handing down to your successors, improved and enriched, the heritage with which you have been entrusted by those who have gone before.

No one of average ability in active practice is now so situated as to be unable to contribute something, and it is astonishing to note how the careful record of what may at first sight appear to be a comparatively trifling observation, or the report of an uncommon case, has furnished to another observer the very item wanting or the key to the completion of a valuable discovery. But let me beg of you to record your observations and express your opinions in plain, concise language.

If you are desirous of being read avoid verbiage and diffuseness. Be brief, yet thorough, and remember that brevity and thoroughness are by no means incompatible with each other, or with clearness of expression and ease and purity of diction. Nothing can be more exasperating to the diligent student than the wordiness, repetition and plagiarism of some of the medical writers of the present day. Utility and perspicuity are more or less sacrificed to a quasi-elegance of style, and the weary reader is obliged to wade through pages of so-called fine writing in order to become acquainted with the author's views which, after all, might have been better expressed in a few pithy sentences.

In the few words which I have spoken to you to-day I have striven to bear in mind that I am not addressing school-boys, but men who have gone through a stern ordeal of preparation for the battle of life, and have, upon examination, not been found wanting.

I have very little to say about your duties to your patients and to brother practitioners—they should be sufficiently obvious to all cultivated men. As regards your patients there is but one point upon which I shall say a word—the necessity of keeping inviolate, in so far as the law and your own conscience permit, the disclosures necessarily made to you in the exercise of your calling. They are sometimes of a very delicate nature, involving reputation and happiness, and they should be held sacred—even at a risk, which not infrequently happens, to your own reputation. The gossipy doctor is a plague to all with whom he is brought into association.

The duties which you owe to your brethren are those which all members of any learned, honorable and responsible calling should observe, to encourage the weak and faltering, to defend those unjustly attacked, to differ, when just cause for difference arises, in a courteous, manly and straightforward manner, and to regard with the eyes of charity the failings and shortcomings of the erring ones.

> "This above all—To thine own self be true;
> And it must follow, as the night the day,
> Thou canst not then be false to any man."

Gentlemen, you have to-day become members of this University, and it is expected of you, and I have every reason to believe that our expectation will be realized, that you will loyally guard its reputation and interests, and that no act or speech of yours will ever tend to sully the fair name of your Alma Mater.

Your brother graduates are scattered over this continent and even beyond it, and, so far, we have every reason to be proud of the position they occupy. On the other hand, the Faculty, equally with the graduates, has its duty to perform in the preservation of the dignity and usefulness of our school; and no outside clamor or pressure of competition of a doubtful character, shall force it to lower its standard of education or relax its wholesome system of discipline.

I need scarcely say in conclusion, Gentlemen, that its members will always take a warm interest in your welfare, and regard with pride and gratification your advancement and well-being, and in their behalf and for myself I most cordially wish you God-speed and a happy and prosperous career.

VALEDICTORY ADDRESS ON BEHALF OF THE GRADUATING CLASS AT THE TWELFTH ANNUAL CONVOCATION OF THE MEDICAL FACULTY OF THE UNIVERSITY OF BISHOP'S COLLEGE, HELD IN MONTREAL, APRIL 3RD, 1884.

Delivered by Dr. W. D. DRUMMOND.

The valedictory—if we consider its annual occurrence and the invariable similarity of symptoms it offers—may now be most reasonably ranged in the category of chronic afflictions. In fact a careful and elaborate diagnosis of every farewell address will disclose three distinct characteristics—warning, eulogy and sorrow. The natural consequence of this is, that no matter how sincere his feelings, how earnest his speech, the valedictorian of to-day is at a disadvantage. The field where he looks for information has been so effectively exhausted by his merciless predecessors that he can find very little which may prove novel or pleasing. He must therefore place implicit confidence in the good-will, patience and indulgence of his audience. You will kindly understand this little insinuation. Convocation day marks the last official act of this scholastic year: by your presence here you desire to manifest your friendliness toward the University of Bishop's College, and to testify to the high esteem and respect in which our professors are so worthily and universally held. You are here to witness the graduates receive their diplomas, and the students those rewards and prizes which have been the source of valuable as well as remunerative competition, and to which they have been entitled by their long, serious, and fruitful labor. Parents there are likewise here, I have no doubt whose good, kind hearts are filled with such honest gratitude to the men who have with such commendable zeal watched over the interests of their sons, and with real magnanimity sacrificed on no few occasions their personal comfort rather than allow their students to suffer in any respect; parents who, with immeasurable joy, view to-day the satisfactory results of the efforts cheerfully made to give their sons a golden opportunity of playing an honorable and successful part in the great contest of life. We are delighted to see before us many of our most prominent citizens the men whose genius helps to build their country and causes it to be respected abroad;—men who, by their ability, perseverance and success, whether in professional spheres or commercial pursuits, have secured the confidence of the community; men who not only highly honor us but, let me humbly say, add lasting and brilliant lustre to their record by the deep interest they take in all matters affecting the different branches of higher education! Unfortunately, my knowledge of the graceful rules of Rhetoric is now very indistinct. Would that I were able to convey in delicate and pleasing sentence the indisputable fact that our hearts are most particularly gladdened by the presence of so many of this noble and beautiful city's still nobler and more beautiful daughters. Since the days of Mother Eve, woman has been often, alas, too often, calumniated; but never has there been an authentic instance recorded wherein she has thus been offended by a medical student!! At all events, ladies, you may ever consider us amongst your foremost champions and warmest admirers. In a moment of astounding enthusiasm, several students made a supreme effort to disculpate fair Eve from all blame: if, in that most praiseworthy attempt they did not meet with the success which their admiration suggested, they triumphantly established that human frailty is extraordinary when temptation is great, and especially that Mother Eve was not a native of Montreal! You will not, you cannot, exact greater proof of their devotion. If my memory serve, me rightly my gifted friend and fellow-student who at our last annual dinner responded to the toast of the Freshman hazarded the statement that the ladies considered his class their favorite one, and the very handsomest that ever entered the college. I know not in what light we poor graduates are viewed; but ladies take cognisance of this—that we have always looked upon you—that we do now and ever will consider you *our* favorite class! It is therefore with undoubted pleasure we see you all here to-day. And still within us arises a feeling of earnest sadness when we consider that this convocation is the last we shall attend, and that we must now bid adieu to the University, our professors and fellow-students. Let us dwell for a few moments on those happy hours which have rolled by like the free current of a melodious stream! How many there are who only see in our station of life trouble, trial and the periodical dread of examinations; they erroneously imagine we are constantly aspiring after liberty. Why, we have never been deprived of our liberty? The laws governing the Institution are in keeping with the

spirit of the times in which we live, and whatever restraint exists is that which in common with all christians we are bound to obey—those moral laws which are written in every man's conscience. Indeed to-day the world is agitated over the possible or impossible solutions of many great and important social problems. Efforts are being made to reconcile capital with labor. Well if the capitalists were to imitate the example of our good professors, there would be no room for complaint on the part of labor. Our capitalists have ever a kind and cheering word for their students: they are ever ready to do them not only kind turns but solid service. And I think I can safely say that nowhere more than in our school do the students respect and honor their devoted professors, none can be found more willing to obey or more eager to profit by their experience. Our preceptors have always commanded our esteem, and when we are consulted with respect to the standard of our school, we immediately point to the staff of men attached to it. We are deeply grateful to them, and we shall ever cherish in our heart of hearts the souvenir of our pleasant relations with them, and of the years which their kindness made not only years of marked steady and constant profit, but also years of unflinching attachment to our school and of undisturbed happiness. They trusted us as gentlemen, and now if we can say that they proved capital professors, capital men and capital friends, we hope they found in us the spirit of labor they desired to instill, and that they have not had reason to regret the implicit confidence they reposed in our honor. Under the guidance of our Dean, who has made himself so dear to us, we are perfectly satisfied that our school is destined to rank second to none in this country. We may have been frequently seen in a state of feverish anxiety, struggling with voluminous and ponderous works, and devouring "words of learned and thundering sound;" possibly some may wonder "how one small head can carry all we must know." It may be we are constantly verging on bankruptcy, that every decline in the money market affects our financial status, and that as a consequence our pockets are generally well lined with unpaid bills of every description. Others may construe this feeling of sadness we experience to-day into an exaggeration, as they only consider the sameness of our life, the anxiety aroused by examinations, the long and painful vigils when hour after hour is consumed in grinding and being ground, the necessity there exists for our daily visits to the hospital, our short hours of rest, and possibly our circumscribed residence.

But I would respectfully submit, have we not our pleasures? Do we entirely ignore the healthy recreation which our magnificent Canadian winter affords? Is it necessary for me to refer to our annual dinners? to our processions? to the innumerable sources whence we derive amusement? My fellow-students will heartily substantiate the statement I now make that our last dinner was in every respect an unqualified triumph. The encomiums bestowed upon our Alma Mater by the representatives of Sister Universities, the eloquence with which our leading citizens spoke, their astonishment at the wonderful progress this school has achieved in a comparatively short period, the forcible manner in which, pointing out the unrivalled opportunities we enjoy, they urged us to continue firm in our allegiance to Bishop's, will certainly produce beneficial effects, increase the already large number of students following the lectures, and stamp our school as one of the best and most popular institutions in Montreal. So great is my respect for our Dean and his co-laborers, so much do we owe them, so staunch are we in our affection for our school, that I believe myself incapable of ever doing justice to the feelings which naturally must find their place in a valedictory.

Show me a more cheerful spot than our amusement hall, a more attractive place than our Reading Room. Can I help regretting the pleasant hours there spent in useful conversation, or over our different games, or reviewing the points which had just possibly been brought out in a lecture.

In the Reading-Room more than elsewhere had I occasion to study the character of my fellow-students. There did I learn to appreciate their generous and sterling qualities of heart and mind; there did we bind fast the links of friendship and affection which unite us, and with all my heart and all my strength do I proclaim that notwithstanding the injurious and unjust manner in which our motives and actions are so often discussed and criticized, I shall be content to count no better or more honorable friends. I know their high moral character; I know their many virtues; I know how earnestly they have striven to uphold the fair and unblemished fame of this Institution. They understand the truth of the saying:

"Honor and shame from no condition rise;
Act well your part, there all the honor lies."

Our sorrow is the more earnestly felt because of the fact that though we entered the University perfect strangers, we have lived together as so many members of one family, and it now seems as though we must part from brothers. Ladies and gentlemen—Though we now may seem solemn, staid and prudent men, though we now may appear to understand the dignity and importance of our mission, we have a very lively recollection of the day when we first commenced our studies, poor, innocent, confiding fresh-men and very fresh at that, but full of spring-like vigor, ardor and enthusiasm. Never did we know the grating sting of scorn; we were charitably initiated by our elders into the manifold secrets of a student's life, and ways, and means. Others followed us, and now the gentlemen who boast the proud title of Sophomores will be followed by others equally as verdant as they were, say yesterday, and as we were say some few years ago. The Sophomore's duty is obvious. He must not forget that no matter how simple the fresh man, his ambition is a noble one: errors he may commit, but his merit is great. Is it astonishing that at times a student does fall? Is it not rather a matter of greater astonishment that far from home, face to face with all the sinful ways of a large city, separated from the refining influences which naturally surround him when in the family circle—is it not surprising, I ask, that he falls so rarely! Ah! ladies, you have it in your power to remove many of the disastrous causes to which I refer. Montreal is now the city of schools, the home of learning, to which young men accustomed to kindness, belonging to the best families, flock for learning. Your hospitality will not only cheer them, but will possibly save them from many snares prepared by the evil spirit. The honest, hard-worked student is certainly more deserving of your encouragement than the obstreperous Dude. Make him, then, feel that he is not entirely a stranger. Bear in mind that his glory does not consist in his beaver, his cane, his gloves, his peculiar gait and optical glass—it reposes in this, that he is preparing himself for a career of usefulness; that the day will come when he, undaunted and fearless, will be the first to rush to the very scene where disease is creating havoc, there to deny himself and, if necessity be, to sacrifice his very life. Can such be branded as cowards? Can such find time to learn the artful and insinuating ways of the common-place Dude? Oh! when I think of the days of old! those dreadful and tragic days, or rather, nights, when, in response to the demand of our vocation, we were obliged to survey by moon-light—and at the solemn hour of midnight when spectres are supposed to fill the ethereal space and ghosts leave their deep graves—when, I say, in that awful moment we were obliged to count, number and determine the different tombstones which had been erected during the day;—when I recall the bitter war which the heroes of Peel, vulgarly designated Peelers, waged against the Knights of the Humerus and Femur, and the carnage which resulted from a collision between the belligerent parties, I return thanks to the gods—our provincial gods—for their wise legislation in appointing an inspector of anatomy. True, much of the romance of our life disappeared; possibly a great source of revenue was abolished, but then our peace of mind and the serene state of our conscience amply recompensed us. Ours is now a happy existence. Even the Philistines of the press have abandoned their evil ways, and now actually look to us for advice. By mistake a student's imaginary mishap may creep into a paper; but it is only a mistake occurring during Carnival time, when, owing to crush and press of matter, the papers are replete with errors. Whenever a student figures rather prominently and under suspicious circumstances in the columns of a journal put it down as a typographical error. There is nothing else, nothing more, nothing less in it.

There are many matters to which time will not even permit of a passing allusion, and, equally as many others, which would necessitate a more graphic description than my humble powers are capable of conveying.

I have but inadequately depicted our pleasures. To form an exact idea of the medical student, you must see him at work; you must see him in his cabinet; you must view him through the opera-glass. He has undoubtedly, as Shakespeare puts it—many parts to play. The early morning—the entire morning—he is disentangling the intricacies of botany, anatomy, histology, surgery, materia medica and innumerable other puzzles; the afternoon he is busily occupied in a similar strain of thought. The evening he is giving a reception; his sorrows are forgotten; joke follows joke;

calumet strikes calumet; cloud after cloud ascends. Later on, he and his friends are metamorphozed into gods, and from the very highest seats in the Academy their melodious voices are heard; if they do not always succeed in enchanting you, their bronchial tubes are certainly distended and exerted to their utmost capacity.

In as far as we, graduates, are concerned, all this is over. We are now possessed of our diplomas, for which we have toiled and struggled. We go forth, fully determined to never disgrace it ourselves, or those by whom it has been conferred. We thoroughly understand the grave responsibilities it imposes and the obligations we must honestly, generously and conscientiously discharge. The influence of the doctor's cheerful temper, the soothing effects of his kind words, as well as the consolation and encouragement afforded by a knowledge of his skill, should at all times be felt. His, indeed, is a vast and critical field of labor, where the means at his disposal for evil are equally as great as those for good. His profession may veritably be termed a profound and sacred ministry, and when, through neglect or ignorance, or betrayal of the family secrets confided to him, he debases it, his treason is more contemptible than ever was that of Judas!

Fully impressed with these ideas, animated with well-tempered enthusiasm and honest zeal, we will now face the battle of life, bravely encounter its storms, and, let us hope, resolutely overcome the obstacles which all beginners must expect. We have been made acquainted with the success which is attending the well directed efforts of the graduates of this school throughout Canada, America and other foreign countries. We know the pains our Dean and his colleagues have taken to worthily fit us for our career. We have had unrivalled opportunities. We have derived no inconsiderable experience from the hospitals. Our professors are men of eminence, enjoying the unbounded esteem of their *confreres*. Will it then be said that their labor, their trouble, and the sacrifices they have so willingly and nobly performed, will have been in vain? Their words, their example, their lessons, are assuredly sufficiently encouraging, and our ultimate success depends on our own efforts, and energy, and devotion to our grand profession!

Farewell, fellow-students! Farewell, dearly beloved Dean and Professors! The remembrance of the happy years spent with you shall ever be foremost in our hearts' memories and affections. To our fellow-students shall we always look for friendship, to our professors for counsel, and to our school for protection. May Providence bless and prosper this University whose importance cannot be over-estimated—this home of education, of broad and enlightened principles, of honest liberty and true fellowship, and, whose future seems so brilliant and destiny so glorious!

GYNAECOLOGICAL REPORT—MONTHLY

By E. H. Trenholme, M.D., Prof. Gynæcology Bishop's College, Montreal.

Reflex Uterine Vomiting.

In a recent lecture given at University Hospital, London, Dr. Graig Hewitt spoke of the common occurrence of reflex uterine vomiting. He pointed out its importance as due to, 1 the distress of the symptom itself produces, 2 that through its interference with the process nutrition, one of its effects was slow starvation.

Dr. G. states that when reflex uterine vomiting is of an obstinate character it is frequently associated with great weariness and want of tenacity of the uterus and a flexed condition of that organ.

The soft uterus readily bends to any temporary increase in the degree of flexion, is attended with aggravation of the vomiting. The several factors in the causation of this disorder are given by Dr. H. as 1. A general enfeeblement of the body, the result of a low condition of the nutritive process in which the uterus participates. 2. The physical weakness and pliability with which the uterus is consequently affected. 3. The reflex condition of the uterus, liable to be intensified by certain movements or positions of the patient. The vomiting, etc., being caused by irritation of the uterine nerves due to compression of the uterine tissues. This is stated by Dr. H. to be almost certainty relieved or removed by restoring the uterus to its normal position and shape.

With regard to diagnosis the lecturer remarked that many cases escape recognition, the sickness being attributed to the liver or the stomach. Many cases of so-called bilious vomiting, and not a few supposed of gastric ulcer, are simply reflex uterine vomiting.

The liver and stomach as causes of vomiting may be excluded by the fact of absence of other symptoms indicative of disease in these organs, while on the other hand there are morbid symp-

toms of uterine distress. One of these symptoms was exaggeration of the sickness when the patient moves or exerts himself. After a time the stomach becomes affected by reflex uterine vomiting. Its secreting power is enfeebled by the prolonged starvation; it is no longer able to secrete a proper supply of gastric juice which adds another factor to the pathology of such cases.

The result of all this is a quasi paralysis of the gastric mucous membrane which is apt to terminate in death even after the vomiting has been cured.

In connection with this subject the following admirable paper, by Dr. J. M. Fothergill, is worthy of careful study—He states that in women reflex disturbances are best exemplified, that as nausea and vomiting are the outcome of a vesical calculus, or a pregnant uterus, or of a blow on the testicles or ovarian irritation, will often set up gastric symptoms usually taken for primary indigestion. The ovary may be swollen and tender, or it may be fixed near the pelvis brim by adhesions. When in front there is pain on emptying the bladder; when on the side, especially the left side, there is pain on emptying the bowels. From this centre may radiate disturbances of many parts.

The extreme frequency of reflex dyspepsia from a tender ovary on the one hand, and the great neglect of the condition in medical literature on the other, must be my explanation for going into this subject somewhat fully.

The patient is usually a comparatively young woman with pallor in her features and general anæmia; but by no means necessarily so. Her complaint is of indigestion coming on soon after taking food, often with nausea and loss of appetite, less frequently with actual vomiting. Yet the tongue is clear; sometimes it has a slight coating; rarely is there any rawness or approach to the bare tongue of gastric irritability. The tongue puts the experienced observer on his guard. Pressure is made over the region of the ovaries, and when it is made over the tender ovary pain is produced—a sickening pain, giving a feeling of faintness, and reflected in the patient's features. Usually she asks to sit down. In a well-marked case the following symptoms, sometimes a few only, but often all, are manifested, much depending upon the patient's intelligence and readiness to answer, First, then, if there be pain produced on defecation, there will be reflex constipation, the pain inhibiting the vermicular action of the bowel. Then there will be found "pain under the heart," as women term it. This is intercostal neuralgia with the three tender spots of Valleix, one at the left apex, a second at the outer edge of the left scapula, about the middle, and a third at the foramen of the posterior rootlet of the nerve, usually the sixth.

I have written elsewhere "waves of nerve-perturbation may arise in an ovary and traverse a series of nerve-fibrils until they reach the peripheral endings of an intercostal nerve, where they are felt as gusts of neuralgic pain." Further experience merely strengthens this view. There will usually, too, be that pain and weight at the vertex with depression or lowness of spirits, and tendency to cry, the outward indications of cerebral anæmia of the posterior lobes, found with irritation in the lower bowel and the generative organs. Then there is anorexia, indigestion, and in some cases vomiting. Such is the real pathology of those cases of so-called subacute gastritis in young females, where obstinate vomiting goes on for weeks, resisting all treatment of the stomach, scoffing at bismuth, hydrocyanic acid, oxalate of cerium, and all remedies of value in morbid conditions of the stomach; where the patient is greatly reduced, the friends almost distracted, and the physician worried out of his life. Yet a year or two afterward, on asking after the object of all this anxiety, it is found she is well and probably married. This vomiting may have gone on for a considerable time and been interpreted as gastric catarrh, or gastric ulcer, and treated as such—without satisfactory results. There is also some pelvic matters which clinch the diagnosis. The uterus is reflexably filled with blood, is turgid and vascular, and consequently there is menorrhagia with leucorrhœa. Orgasm is readily produced by slight friction, or occurs spontaneously in sleep; and this irritability communicates itself to the adjacent bladder-centres in the cord, and there is inability to retain the contents of the bladder. Further, there are commonly times of great itching with heat or dryness in the fundament, and often in the vagina also.

Such are the features of a well-marked malady, which, however, has not yet found its way into our text-books. Word by word, indeed letter by letter, I learned to spell it out among my hospital out-patients; but the trouble brought with it its reward in the power to detect, and consequently to treat correctly, a very common malady, in-

fluenced by measures directed at one or other of the outcomes of the condition, yet often tractable to appropriate measures. Those who have taken the pains to master the malady in all its details, testify to the advantages they gained in practice therefrom. It is a condition unsuspected. It frequently lies at the bottom of the ill-health which, when co-existent with an old apex consolidation, is taken for commencing phthisis; and when profuse night-sweats are added to the effects of the indigestion, the weakened lung-apex may and often does break down. How often this misinterpretation has wrecked the peace of a family, it becomes not me to say.

The sex, and often, too, the age of the patient should put the physician on his guard. If the tongue also be normal or only slightly coated, and free from the appearance associated with gastric irritation, then the examination of the patient ought to be conducted on the lines just laid down. It travels over some very delicate ground for both physician and patient; and therefore must be conducted with every consideration for the patient's feelings. Yet enough can be gleamed from the most difficult patient to cross-examine, usually at least to determine the nature of the case. Sometimes it is possible to state her case to her, including her most inward feelings, in a manner which makes the patient feel as if in the presence of a magician.

Having made the diagnosis, the treatment suggests itself. A blister over the tender, or otherwise offending ovary. Bromide of potassium, the drug *par exeellence* in all reflex affections, and sulphate of soda or magnesia for the constipation. If there be also night-sweats then some atropine, say from a seventy-fifth to a twenty-fifth of a grain at bedtime. Then if there be much sickness it may be well to give some bismuth, with or without hydrocyanic acid and soda, but this is only ancillary to the other treatment. Usually some injections of alum water are required for the leucorrhœa. A rational treatment indeed, founded on the nature of the malady, and, presto, the intractable patient gets well, to the unfeigned delight of all. Sometimes the result is not so satisfactory as to time, while in those cases where the morbid ovary is bound down by adhesions, relief is all that is practically attainable. But the bulk of cases readily do well.

Now some other matters may be mentioned. First as to the effects of carking care upon the assimilative organs; they have been recognized by writers, medical and other, since the dawn of literature. "Lean, hungry men" have been regarded as the type of the brainworker, including the conspirator. While the rubicund visage of the well-fed man has ever been looked upon as indicative of an easy mind. Such generalizations are broad and true; but the subject admits of closer handling in the light of the present day.

In "this madly striving age" the pressure of business absorbs so much of the daily store of energy that the digestive organs are robbed of much of the *vis nervosa* that belongs to them, and, therefore, are only capable of digesting light food. Of old when anything uncommon had to be done, a good foundation was laid, as materfamilias expressed it, by a substantial breakfast. The rule to-day is rather in the opposite direction. A few illustrations will demonstrate what it is desired to convey. One of our leaders of scientific medicine, one of the least fanciful of men, commonly lunched on a beeksteak, eating and enjoying the fat. But experience taught him that whenever more wearied than usual it was prudent to leave the steak-fat and take butter instead. When tired he could not digest the beef-fat, which he enjoyed as a rule. A lady well known to the writer has always to be very careful about what she takes when tired, else a severe attack of indigestion will be experienced. After a long walk, or its equivalent, a light meal alone is permissible, or compatible with comfort, and one of McKesson & Robbins' pepsin pills is in request. Some fried fish after a long walk set up severe dyspepsia with delirium, and left behind great susceptilility in the digestive organs for months after, requiring the greatest care in diet, and a medicinal course.

A light meal and a little wine are the proper method of meeting the emergency in our day. What can be digested without drawback under ordinary circumstances will not be satisfactory digested when the system is exhausted either by bodily or mental toil.

The effects of acute emotion in upsetting the digestion are thoroughly recognized; in fact, anorexia is so set up, and the food which would not be digested is not taken. But we are still far from comprehending fully the more chronic effects of wearing care or anxiety. Yet the fact must be recognized that where the mind is greatly exercised, while the body is insufficiently exercised, the dietary must be regulated accordingly. A plate of

porrige, oatmeal, cerealine, or hominy, with a pint of cream, and some stewed fruit to finish off with for breakfast. For lunch, some well-buttered mashed potatoes, with buscuit and butter and a glass or two of milk. For dinner, some boiled fish, followed by some chicken or game, and a milk-pudding made without an egg, and digestive biscuit and butter (with just a nip of cheese as a flavoring agent for those who can eat cheese), with a glass or two of good French wine or its equivalent. Such is the dietary, or onght to be, of the man who has much brain-work to do. And further, he should allow himself plenty of time over his meals. Then there should be sufficiency of sleep to rest the wearied organism.

The preventive treatment of neurosal indigestion is quite as important as its palliative treatment when once established. The lines are the same in both, viz., to give easily assimilable food, rich in fat, and containing albuminoids, but in sparing quantities, to allow a proper time for meals and a sufficiency of sleep. Beyond this is the matter of phosphorus. Phosphorus and fat in combination are the food of the brain *par excellence;* and to this dietary, rich in fat, it may be well to add phosphorus in pill, or better still in the syrup of the hypophosphites. Yet when all this has been done, and the latest revelations of physiology worked out by the chemist are placed at the patient's service by his physician, there comes that indispensable factor which the patient alone can do, viz., take proper care of himself. When I look round on the men I know, whether in the profession or out of it, which are those who are steadily holding their own, accomplishing huge quantites of work, yet with their energies unimpaired and their working-power as good as ever? They are those who do not add a day's play to a hard day's work! Men who, after a hard day of work, take their dinner quietly and slowly—not bolting it to rush off to the theatre or other place of amusement, as a billiard-table, perhaps. Who spend a quiet evening in intellectual pleasure, unbending the bow, while adding to their stores of knowledge; and going to bed early, to sleep in a cool bedroom, instead of breathing a hot, vitiated atmosphere till nearly midnight, and then gulping down some indigestible mass like a lobster salad, and then, quite late, lying down to sleep—to leave a wearied system to digest the late supper.

Of old, as said before, the more work the more meat. "Work goes in at the mouth". The fact that an underfed animal, man or beast, could not accomplish much work was vividly realized: and the hard-headed northern farmer had his farm laborers eat at his own table. But the converse is not so absolutely certain. Meat will not necessarily give strength, *i. e.*, if it be not digested. Constantly patients—not with primary indigestion, for that pretty well regulates matters itself—suffering from malassimilation come under notice, who have been eating all the animal food they could get down, under the impression that this is the plan to adopt.

In these cases the albuminoids which reach the liver by the portal vein are not elaborated and passed forward as the serum albumen of the liquor sanguinis, but are thrust downwards as bile acids or lithates. "To feed the patient is to feed the disease," as the old phrase ran. To crowd the liver with albuminoids by a meat dietary, the natural digestive powers being helped by artificial digestive agents, is still further to embarrass it. The attempt defeats itself. The mal-products of assimilation find their way into the blood and act as toxic agents, enfeebling the mental processes, involving the mind in gloom, and depriving the unhappy individual of all pleasure in life, till death becomes positively attractive.

Whether such regimen is old-fashioned or in advance of the times, matters little. It will have to be adopted: The capacities of the liver will have to be appraised, and if Dame Nature, knowing better than we perhaps do, attempts to balance matters by cutting down the appetite, it is not well to thwart her by bitters. If a man feel unequal to his work, it may be wise at times to cut his coat according to his cloth. It may not always be prudent for a man to whip himself up to an ideal of energy and working-power, as if he was a steam-engine. The increase of Bright's disease in our day may not be entirely accounted for by our increased acquaintance with it and the means of its detection. Over-work, if Clifford Allbutt is to be believed, and overcramming with meat, if some others of equal authority are to be credited, have much to do in upsetting the liver first and damaging the kidneys afterwards, to say nothing of the lithiasis, cholæmia and toxic oxalates which belong to this condition of secondary indigestion, while the relations of glycosuria to over-taxation of the nervous system are now well recognized.

The following is Dr. Fothergill's formula for asthma (Med. Sum.): ℞. Tinct. lobeliæ, ℥ v; ammonii iodidi, ʒ ij; ammonii bromidi ʒ iij; syr. totultani, ℥ iij. M. Teaspoonful every one, two, three, or four hours. This gives relief in a few minutes, and sometimes the relief is permanent.

Sulphide of calcium in the treatment of scabies has been used by Dr. Thomas N. Dolan in some thousands of cases. (*British Med. Journal*, Feb., 1884). The preparation used in the Poor-law service is known as the Golden Lotion. It is made as follows: Flour of sulphur, 100 parts; quicklime, 200 parts; water, 1,000 parts. Boil, stirring occasionally until incorporated; cool and decant into sealed bottles. The patient is put into a warm bath, then the solution is painted on with a brush, after which he is put into bed between blanketes, or in a flannel night-gown prepared for the purpose. In a short time the body is of an almost golden color, owing to the deposit of sulphur. The good effect is quickly manifested, the itching ceases, and after another warm bath the patient is, as a rule, discharged cured. In cases of long standing, where there are scales and crusts, the treatment is of longer duration. This method has the advantage over sulphur ointment of cleanliness, ease of application, penetrability, rapidity of cure, and cheapness. The over use of the remedy may produce troublesome irritation of the skin; this may be remedied by a bath of soda and water.

A RELIABLE TÆNIAFUGE.

℞. Extracti filicis maris,	ʒ iss
Pulveris kamalæ,	ʒ ij.
Mucilaginis acaciæ	
Syrupi simplicis,	aa ʒ ij.
Aquæ cinnamomi,	ad ℥ iij.

M. S.—Half to be taken at bed time, and the other half early in the morning.

Mr. J. B. Lawson reports good results from this in the *Glasgow Med. Jour.*, January, 1884.

Society Proceedings.

MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

Stated Meeting Feb 15th, 1884.

T. A. RODGER, M.D., PRESIDENT, IN THE CHAIR.

Dr. OSLER exhibited the following pathological specimens:—

1. *Portions of Muscle, Intestine and Kidney from a Horse dying of Toxic Hæmoglobinuria or Azoturia.*—Dr. Osler mentioned that this disease was rather common here, and that usually the animals recovered. The disease generally attacks well-fed, well-cared horses which have been kept in the stable for a few days and then put to work again. The horse, while in the stable and on taking him out, appears perfectly well, but after an hour or two's work becomes weak, trembles and falls, and may die in 24 hours. The muscle shown was from the gluteal region, which is the part most affected. It had a parboiled appearance, was pale, and much infiltrated with serum. The intestines were deeply congested. The kidneys were somewhat swollen, soft, and congested. On section, the Malpighian tufts and cortical portion were seen to be engorged. Microscopically, the muscles had a teased appearance, with the striæ almost obliterated. The kidneys showed the Malpighian tufts to be congested. The epithelial cells of the tubules were filled with granular matter. The urine drawn by catheter was coffee-colored, and contained albumen and large granular tube casts. This disease is thought by Williams and Fleming to be caused by an excess of nitrogenous matters in the blood, though the pathology is not at all clear.

Dr. Ross said it was very remarkable to see such advanced tissue changes produced in so short a time, and asked Dr. Osler if the disease might not have been latent, and suddenly, from some outside cause, develop somewhat in the same way as does acute inflammatory nephritis in a child recovering from scarlet fever. The child, though appearing well, is really not so, for a slight cold may suddenly light up the latent kidney trouble.

Dr. OSLER thought that possibly Dr. Ross' theory might help to clear up some of the difficulties.

2. *Organized Thrombus of Left Iliac Vein.*—This specimen was solid and firm, with absence of coloring matter of the blood. Dr. Osler remarked how variable was the time taken to organize a thrombus. Here it took only three days to be as far advanced as in other cases of ten or even fourteen days' duration.

3. *Dermoid Cyst of Ovary containing cebum, hair and teeth.*—This specimen, about the size of two closed fists, was removed by Dr. Fenwick and contained five teeth, one of which, attached to a piece of bone, was a well-formed incisor.

3. *Rapidly-formed Scirrhus of the Liver, with Tumor at side of the neck.*—The above was removed post-mortem from a man sent to the hospital from Ottawa. He came to have the tumor in the neck removed. On admission, no abdominal trouble was noticed or suspected. The tumor in the neck was situated in the upper triangle, moveable, and had been growing six or eight months. It felt as if it could easily and safely be removed, but symptoms of difficulty in swallowing and alteration of voice pointed to implication of the pneumogastric nerve, so that the case was watched for a few days, when it was observed that the liver was enlarged. The man said he had been growing larger for about three weeks. He had been a hard drinker. From the rapidity of growth and absence of jaundice, Dr. Shepherd diagnosed cancer, and had him transferred to the medical side, under Dr. Ross. On dissecting out the neck tumor, which was about the size of one's fist, Dr. Shepherd found it attached to the deep blood-vessels and nerves, the pneumogastric being deeply involved, and some of its strands separated. The liver weighed nearly nine pounds; on its under surface was a huge, isolated mass, with secondary nodules around.

Dr. Osler said that both tumors were scirrhus, and that it was hard to say which was the primary.

Dr. Shepherd thought the one in the neck must be, from the fact that it had been growing so much longer.

Dr. Ross said that this growth in the liver was the fastest he had ever seen; every 48 hours would show a noticeable increase in size. The man never drew attention to his liver till ten or twelve days before his death, when he had some inflammation of the peritoneum.

Sarcomatous Tumor removed from the Thigh.—Dr. Perrigo exhibited the above, which he had removed from a lady aged 38, the mother of six children. It was attached to the periosteum, below and a little behind the great trochanter, extending under the gluteus maximus, and completely filling the hollow between the trochanter and tuber ischii. It did not involve the muscles, but simply displaced them. It rested upon the sciatic nerve. The patient first consulted Dr. Perrigo about two years ago, for sciatica, and about one year ago he detected a tumor about the size of an egg, and freely moveable. It increased in size steadily, and during the past three months very rapidly. Four or five years ago this lady had had an attack of phlegmasia dolens, from which she made a tardy recovery. The tumor was about six inches long by four thick. A recurrence is looked for.

Puerperal Fever.—Dr. Alloway read a paper on this subject, in which he strongly advocated the use of suppositories containing 10 grains each of iodoform and boracic acid, made by pressure, with cocoa butter. As a prophylactic vaginal antiseptic injection for normal labors, he recommends a solution of Hydrarg. Bichlor., $\frac{1}{2000}$ strength. He laid stress on the fact that the syringe used must be a new one.

Dr. Kennedy said that he had seen a very large number of cases of puerperal fever; he had three outbreaks of the disease in the lying-in department of the Western Hospital, and a great many in the practice of his *confreres*. In the hospital he had noticed how easy it was for the disease to originate, and was struck with differences in the temperatures according to the nurse on duty. With some nurses the temperature ran high, but with others very little change would be observed, and he believed that strict antiseptic precautions were more necessary with obstetric cases than in surgical operations. In the first outbreak in hospital, it spread from a private patient attended by a physician, who at the time, was in close attendance on a case of puerperal fever outside. He stated that most of the modern authorities on obstetrics grouped under the heading of puerperal fever all the different conditions which might arise during the puerperal state; but, personally, he did not think it proper to look upon a pelvic cellulitis, inflammation of the uterus, or a phlegmasia dolens, as more than being coincident with the fever, although it was thought by some that these conditions were alternatives of the disorder. Some years ago a paper was published in an English periodical, giving three forms of the affection. First, the pyæmic; next, auto-infection; and, thirdly, by contagion. He believed that this division was the best, and agreed fully with his own observation. The pyæmic form was rare, and that by contagion also less frequent than by auto-infection,—the latter form comprising by far the greater number of cases he had seen. As for the general treatment of these cases, it must be chiefly preventive, and he had found good results from Dr. Goodell's plan of placing the patient upon quinine in combination with an acid, and

adding either morphia, ergot or digitalis, as may be indicated. During the presence of the fever, he had found turpentine in 10 drop doses every four hours to be of great value. For the local treatment, every case would require to be treated according to the coexisting complication. As for iodoform, this had been used in the Western Hospital for over three years, being introduced into the uterus whenever the discharge from that organ was offensive; and as the majority of cases in hospital were primipara, vaginal lacerations were frequent, and in these it was the constant practice to introduce iodoform suppositories after each injection. For the injection, he at first used carbolic acid, but although this was more cleanly, the permanganate of potash was now preferred, on account of its more powerful action in purifying the discharges and in destroying septic germs. Of the induction of puerperal fever by zymotic disease, he would mention a case which occurred in hospital. A young girl, who had been an inmate for some time, awaiting her expected confinement, was allowed to visit her friends, at whose home there were sick children. A fortnight afterwards she was taken with labor pains and delivered naturally. At the time her temperature was noticed to be 103 F. As puerperal fever was suspected, she was isolated. The following day the bright rash of scarlet fever covered her entire body, and the nature of the disease thereby indicated. Death ensued; and in this case there could be no doubt of its cause, which could not be true puerperal fever, as it manifested the high febrile state before the labor, which latter was somewhat premature and a consequence. In connection with this subject, he would draw attention to that condition which was known as milk fever, the weed or ephemeral fever. Very little mention was made of this disturbance by the later obstetric authorities, but a separate chapter would be found in Churchill. As he had known some of his younger *confreres* to mistake it for puerperal fever, he thought more attention should be directed to it. Formerly it was more common and its rarity now must be ascribed to the better diet prescribed, and also to the child being suckled soon after birth, not waiting until the breasts became gorged with milk, as was the old practice. In hospital, the few cases which had occurred were in badly fed women, and had given an opportunity to students to diagnose between the two conditions. These cases were always marked by the violence of the chills, which commenced between the shoulders. In septic forms, the chill spread from the extremities. This difference was strongly diagnostic; and as ephemeral fever ran its course in from 24 to 48 hours, marked by profuse sweating and high temperature, it was often treated by a placebo, so as to allow the case to run its course for illustration. Generally Aconite and Ammon. Acet. was given. He had no doubt that such cases were often mistaken for puerperal fever, and treated by large doses of quinine, the subsequent rapid termination of the case being ascribed to the influence of the quinine. In puerperal fever, he had no faith in the large doses of quinine usually given, not having seen any beneficial results from their use.

Dr. TRENHOLME said his experience with puerperal fever was limited to consultations with others, having never had a case in his own practice. He believed each case ought to be treated, not by any rule, but separately. He also spoke against the common method of twisting the placenta for removal of the membranes, believing that it often breaks inside, enclosing a small clot of blood, which would do mischief by decomposing. He advocated Dr. Goodell's rule of getting the patient to walk from the bed on which she had been confined to her own room, and also of allowing her to sit up each day for a short time to favor drainage.

Dr. GARDNER remarked that while he admitted the great value of intra-uterine antiseptic injections, and of intra-uterine use of iodoform in the manner recommended by the reader of the paper, it could only be useful in forms of puerperal poisoning by absorption of septic stuff from the decomposition of matters contained in the uterus—the sapræmia of Matthews Duncan; the ichor-spræmia of others. He believed with Dr. Robert Barnes* on the existence of another form of puerperal blood-poisoning, with fever, due to failure of the lymphatic system and liver to modify the waste stuff thrown into the circulation from the disintegrating uterus and appendages, and to failure of the excretory organs —the lungs, kidneys and skin—to remove from the system that same waste-stuff. In such a form of fever he could not see how such remedies could have any effect. Their utility must always be limited. With reference to the mode of intra-uterine injection, he had had recently a case of enucleation of a large sloughing sessile myoma, in which the after-treatment consisting in retaining

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within the uterus for a fortnight a double drainage-tube, through which irrigation, at times continuously, and again intermittently, was practised, which suggested to him that this might, in some puerperal cases, be the best method of securing drainage and of irrigation of the cavity of the uterus. The conditions, it is true, are not exactly similar. In both there is a raw surface on the interior of the uterus, but in one there is superadded the importantly complicating blood conditions from the presence of waste-stuff from the disintegrating uterus. In the case of the myoma alluded to the antipyretic effect of the irrigations was most marked several times in the course of the after-treatment.

Dr. KENNEDY mentioned having recently to treat an unusual accident, viz., dislocation of the head of the humerus, with fracture of the coracoid process of the scapula.

Dr. SHEPHERD made a few remarks on the difficulty of diagnosing such cases.

Progress of Science.

THE THERAPEUTICAL DRINKING OF HOT WATER, ITS ORIGIN AND USE.

The therapeutical drinking of water, at a temperature of blood heat to 150° Fahr., having become popular enough to call for an allusion to it in the London *Lancet* as a "valuable American contribution to medicine," and since it seems to be used at random from the directions of its distinguished introducer, I have thought that the origin and proper use of hot water should become history.

The practice dates back to 1858, when Dr. James H. Salisbury, of this city, concluded a series of experiments on feeding animals, to ascertain the relation of food as a cause and cure of disease.

Among other things he found that the fermentation of food and the products of these fermentations were the chief primary factors in producing the diseases which arise from unhealthy alimentation. With the idea of removing these diseases by removing their causes, he employed hot water, in order to wash out the acetic, butyric, hydro-sulphuric, lactic and saccharic acid and sulphide of ammonium fermentation vegetations — yeasts — from the stomach and intestines.

At first he tried cold water on his men to remove these products of fermentation. But cold water caused distress, pain and colic. So he increased the temperature of the water. Luke-warm water made them sick at the stomach, and excited peristalsis upward. The temperature of the water was increased to 110° and up to 150° F. This was well borne, and afforded a feeling of agreeable relief which thousands since testify to. The hot water excites normal downward peristalsis of the alimentary canal, washes down the slime, yeast and bile through its normal channels—washes out the liver and kidneys, and the bile is eliminated through the bowels and not through the blood, via the kidneys.

It was some time before the proper times of administration and proper number of ounces of hot water, and the proper number of ounces to be drunk at meals could be settled, in order to obtain the best results. These directions may be found published in connection with Salisbury plans for the treatment of consumption, Bright's disease, diabetes, fibroids, sclerosis and colloid diseases.

At the risk of repetition, for the sake of a more thorough understanding of the subject, these details will be plainly and simply given.

DIRECTIONS FOR USING HOT WATER ACCORDING TO THE SALISBURY PLANS.

1. *The water must be hot: not cold or luke-warm.*—This is to excite downward peristalsis of the alimentary canal. Cold water depresses, as it uses animal heat to bring it up to the temperature of the economy, and there is a loss of nerve force in this proceeding.

Luke-warm water excites upward peristalsis or vomiting, as is well known. By hot water is meant a temperature of 110° to 150° F., such as is commonly liked in the use of tea and coffee. In cases of diarrhœa the hotter the better. In cases of hemorrhages the temperature should be at a blood heat. Ice water is disallowed in all cases, sick or well.

2. *Quantity of hot water at a draught.*—Dr. Salisbury first began with one half pint of hot water, but he found it was not enough to wash out nor to bear another test founded on the physiological fact that the urine of a healthy babe suckling a healthy mother (the best standard of health) stands at a specific gravity varying from 1015 to 1020. The urine of the patient should be made to conform to this standard, and the daily use of the urinometer tells whether the patient drinks enough or too much hot water. For example, if the specific gravity of the urine stands at 1030, more hot water should be drunk, unless there is a loss by sweating. On the other hand, should the specific gravity fall to 1010, less hot water should be drunk. The quantity of hot water varies usually from one half to one pint or one and a half pints at one time drinking.

The urine to be tested should be "the urina sanguinis" or that voided just after rising from bed in the morning before any meals or drinks are taken.

The quantity of urine voided in twenty-four hours should measure from forty-eight to sixty-four ounces. The amount will, of course, vary somewhat with the temperature of the atmosphere, exercise,

sweating, etc., but the hot water must be given so as to keep the specific gravity to the infant's standard to wit, 1015 to 1020. The urinometer will detect at once whether the proper amount of hot water has been drunk, no matter whether the patient is present or absent. Another test is that of odor. The urine should be devoid of the rank "urinus" smell, so well known but indescribable.

The Salisbury plans aim for this in all cases, and when the patients are true and faithful the aim is realized.

3. *Time of taking hot water.*—One hour to two hours before each meal, and half an hour before retiring to bed.

At first Dr. Salisbury tried the time of one hour before meals, but this was apt to be followed by vomiting. One hour to two hours allows the hot water time enough to get out of the stomach before the food enters or sleep comes, and thus avoids vomiting. Four times a day gives an amount of hot water sufficient to bring the urine to the right specific gravity, quantity, color, odor and freedom from deposit on cooling. If the patient leaves out one dose of hot water during an astronomical day, the omission will show in the increased specific gravity as indicated by the urinometer, in the color, etc. Should the patient be thirsty between meals, eight ounces of hot water can be taken any time between two hours after a meal and one hour before the next meal. This is to avoid diluting the food in the stomach with water.

Mode of taking the hot water.—In drinking the hot water it should be sipped and not drunk so fast as to distend the stomach and make it feel uncomfortable. From fifteen to twenty minutes may be consumed during the drinking of the hot water.

5. *The lenght of time to continue the use of hot water.*—Six (6) months is generally required to wash out the liver and intestines thoroughly.

As it promotes health the procedure can be practiced by well people throughout life, and the benefits of "cleanliness inside" be enjoyed. The drag and friction on human existence, from the effects of fermentation, foulness, and indigestible food, when removed, gives life a wonderful elasticity and buoyancy somewhat like that of the babe above alluded to.

6. *Additions to hot water.*—To make it palatable, in case it is desired, and medicate the hot water, aromatic spirits of ammonia, clover tea blossoms, ginger, lemon juice, sage, salt and sulphate of magnesia are sometimes added. Where there is intense thirst and dryness, a pinch of chloride of calcium or nitrate of potash may be added to allay thirst and leave a moistened film over the parched and dry mucous membrane surfaces. When there is diarrhœa, cinnamon, ginger and pepper may be boiled in the water, and the quantity drunk lessened. For constipation a teaspoonful of sulphate of magnesia or one-half teaspoonful of taraxacum may be used in the hot water.

7. *Amount of liquid to be drunk at a meal.*—Not more than eight ounces. This is in order to not dilute the gastric juice or wash it out prematurely, and thus interfere with the digestive processes.

8. *The effects of drinking of hot water, as indicated, are* the improved feelings of the patient. The fæces become black with bile washed down its normal channel. This blackness of fæces lasts for more than six months, but the intolerable fetid odor of ordinary fœces is abated and the smell approximates the odor of healthy infants suckling healthy breasts, and this shows that the ordinary nuisance of fetid fœces is due to a want of washing out and cleansing the alimentary canal from its fermenting contents. The urine is clear as champagne, free from deposit on cooling or odor 1015 to 1020 specific gravity, like infant's urine. The sweat starts freely after drinking, giving a true bath from centre of body to periphery. The skin becomes healthy in feel and looks. The digestion is correspondingly improved, and with this improvement comes a better working of the machine. All thirst and dry mucous membranes disappear in a few days, and a moist condition of the mucous membrane and skin takes place. Ice-water in hot weather is not craved for, and those who have drunk ice-water freely are cured of the propensity. Inebriety has a strong foe in this use of hot water.

9. *Summary of general considerations on the therapeutical drinking of hot water.*

(*a*) Foundation of all treatment of chronic diseases.

(*b*) Excites downward peristalsis.

(*c*) Relieves spasm or colic of bowels by applying the relaxing influence of heat inside the alimentary canal, just as heat applied outside the abdomen, relieves.

(*d*) Dilutes the ropy secretions of the whole body, and renders them less adhesive, sticky and tenacious.

(*e*) Inside bath.

(*f*) Dissolves the abnormal crystalline substances that may be in the blood and urine.

(*g*) Necessary to have the hot water out of the stomach before meals.

(*h*) Use is to wash down the bile, slime, yeast and waste, and have the stomach fresh and clean for eating.

(*i*) Promotes elimination everywhere.

(*j*) If objection is made, it must be remembered that we are 75 per cent. water.

(*k*) The gas that sometimes eructates after drinking hot water, is not produced by the hot water, but was present before, and the contractions of peristalsis ejects it, or sometimes it is that the air is swallowed in sipping as horses s uk air. The amount of gas contained in the alimentary canal is larger than most are aware of, and yet it is not excessive, as it takes some time to eruct a gallon of gas from the stomach. This length of time can be tested by submerging a gallon jug

filled with air under water, and observing how long it will be in filling with water.

(*l*) Some physicians have advised against hot water, on the ground that it would "burn the coating of the stomach." If this is so, then a denudation of the lining of the stomach continuously for twenty-four years is compatible to a state of otherwise perfect health with no sign of illness for that period of time, and is also compatible with the numerous cases that have occurred under the use of hot water as a foundation for treatment during the past twenty-five years. Again the same physicians drink tea and coffee at the same temperature, and this act belies their warning and shows their inconsistency and want of consideration before speaking.

(*m*) These dicta about the therapeutic drinking of hot water were founded on the physiological experiments at the outset, verified in pathology and based on the experience derived from the treatment of thousands of cases since 1858. They are open, so that all who will may partake of this "water of life" freely.

10. *Personal estimate of the founder of this practice.*—"If I were confined to one means of medication I would take hot water." "I have drunk it for twenty-five years."

Corroboration of the writer.—The writer testifies that his own personal experience and observation corroborates the truth of these statements of the Salisbury plans.—*Ephraim Cutter, M.D., in Gaillard's Journal.*

CHROMIC ACID IN AFFECTIONS OF THE TONGUE.

Mr. Henry T. Butlin, F.R.C.S., has used chromic acid in certain affections of the tongue, with markedly good effect. In June, 1881, he treated two cases of glossitis with a ten grain solution of chromic acid in water, painted on the sore areas of the tongue three or four times a day. Both cases improved. A case of secondary syphilitic, deep and jagged ulcers of the tongue, and ulceration of the inside of the cheek, which showed no improvement under hyd. c. cret., iodide of potass., or liq. hyd. bichlor., were, after a week's treatment with chromic acid solution, almost completely healed. Another case of flat mucous tubercles, due to secondary syphilis, on the right border of the tongue, which had resisted treatment with hyd. c. creta for about three and a half months, was almost completely cured in three weeks.

Mr. Butlin has used chromic acid in several different inflammatory conditions of the tongue, in many cases with most gratifying success. In 27 cases, 20 have been cured or greatly relieved, 7 having received little or no benefit. The seven cases were either of chronic superficial glossitis, or of *tertiary* syphilis. The twenty include seven of chronic superficial glossitis, and thirteen of various *secondary* syphilitic affections. Mr. B. concludes that chromic acid cures with marvelous rapidity *secondary* affections, ulcers, mucous tubercles, and condylomata. It produces no appreciable effect on *tertiary* affections, gummata extensive ulcers, or tubercular syphilides. Some cases of chronic superficial glossitis, with slight ulceration and renewed inflammation are rapidly benefited by it. In cases of glossitis in which the tongue surface is attacked by a fresh inflammation of great severity, glycerite of boracic acid and soothing remedies are more suitable; chromic acid rendering these worse. He reports one case of *tertiary* syphilitic ulcers of the tongue which was cured in about two months by combined chromic acid and mercury treatment, although it had obstinately resisted purely anti-syphilitic treatment for many months. The strength of the solution usually employed is grs. x–℥ j water; in some cases grs. xv–℥ j. The patient is told to paint the diseased parts three or four times a day with a camel's-hair brush dipped in the solution. There is seldom any pain or discomfort; sometimes a little smarting at first.—*Practitioner.—Med. News.*

ACID DYSPEPSIA.

In a paper read before the Manchester (England) Medical Society, Dr. McNaught claims, from experiments made on himself, that the acids which cause the irritation in heartburn is hydrochloric acid. He analyzed matter obtained from his own stomach when he was suffering from acidity and was thus led to the above conclusions. He further showed that the tendency of hydrochloric acid is to prevent lactic fermentation, and he adduces this as additional evidence that the acidity in acid dyspepsia is not due to lactic acid.

We are willing to concede the fact as above stated, but we repudiate the deductions. The author of the paper displays that unfamiliarity with this subject which is at the root of the empirical and often mischievous treatment of acid dyspepsia by means of alkalies, etc. This condition may be due either to an excess or a deficiency of hydrochloric acid, and the treatment differs accordingly. When hydrochloric acid is deficient the process of normal digestion gives place to fermentation, in which lactic and butyric acids are both generated. In the case of excessive secretion of hydrochloric acid the acidity will be found to be greatest either before meals, and is relieved by food, or immediately after meals. In deficiency of this normal ingredient of the gastric juice the food remains undigested and in from two to four hours after its ingestion, according to the nature of the food, fermentation and acidity supervene. In the latter case the eructations are not only acid but peculiarly irritating to the œsophagus, the existence of butyric acid being particularly apparent to the taste.

In the treatment of each of these varieties of acidity, acids are to be exhibited, but in an intelligent manner, and in conformity to the physiologi-

cal law that acids check acid secretions. The exhibition of hydrochloric acid in combination with the simple bitter tonics one or two hours before meals overcomes to a degree the excitability of the glands and thus render them less susceptible to the irritation of the food, the bitters assisting, by their direct tonic action on the tissue, toward permanent relief. When a deficiency of hydrochloric acid is secreted this should be supplied immediately after each meal. The acid given at this time facilitates digestion and thus prevents that fermentation which manifests itself in lactic and butyric acid eructations. The joint exhibition of pepsin in such cases aids in digestion.—*Medical Age.*

OBSTRUCTED BOWELS.—BELLADONNA LOCALLY.

The external application of belladonna was resorted to by Dr. Costine (*London Lancet*) in a case of intestinal obstruction, and was followed in a few hours by a discharge from the bowels. There was obstinate constipation, no evacuation having taken place for fourteen days. Vomiting had occasionally taken place, and there had been much pain in the abdomen. Examination showed much distension of the belly, though the walls were not tense. There was occasionally a soft, defined swelling in the right iliac region about the size of the cæcum, but no lumps or bowel could be felt; there was no hernia and nothing abnormal could be felt per rectum. A large quantity of fluid could be injected. The patient had taken all kinds of purgatives without effect. One grain of opium every six hours was ordered; also cold, strong beef tea and milk in small quantities often repeated. The next day there was freedom from pain and vomiting, but on the second day after, he was much prostrated, with a frequent and intermittent pulse and fæcal vomiting. Six ounces of brandy in twenty-four hours and plenty of beef tea were ordered, and one ounce of belladonna ointment spread on a large poultice was applied over the abdomen, and frequently repeated. The belladonna was first applied in the afternoon, and the same evening the bowels were opened. He progressed favorably for several days, when constipation again took place, which castor oil failed to relieve, but which the external application of belladonna, and opium internally, removed.—*Med. Rev.*

VOMITING OF PREGNANCY.

The following drugs have been recommended for this distressing symptom, which we here arrange alphabetically rather than in the order of their relative importance :—

Arsenic, in the form of Fowler's solution, in drop doses given before meals, is often of great advantage.

Atropia has been highly recommended for the vomiting of pregnancy, in the dose of $\frac{1}{120}$ of a grain, injected subcutaneously in the epigastric region. It is said to arrest it promptly and permanently after other remedies have failed.

Bismuth, subnitrate, in ten-grain doses combined with ¼ grain carbolic acid, mixed with a suitable adjuvant, to be taken three or four times daily.

Calumba, in tincture, dose 5 to 10 drop : in infusion, dose teaspoonful.

Cerium, oxalate, dose 2 to 5 grains. Usually the best effects are produced after several days' use—Sir James Simpson.

Champagne, tablespoonful doses with ice, every fifteen minutes.

Chloral hydrate, with bromide of potassium, 10 grains of each at night when the symptoms first develops.—W. C. Burke.

Copper, sulphate, $\frac{1}{90}$ grain three times daily.

Hydrocyanic acid, dilute, three-drop doses once in four hours.

Iodide, tincture, drop doses every hour or two.

Nux vomica, tincture, drop doses every hour or two.

Pepsin, five to ten-grain doses.—*Med. Bulletin.*

INHALATIONS OF IODOFORM IN TUBERCULOSIS.

Dr. Davezac, of Bordeaux, employs iodoform by inhalation in cases of tuberculosis. The apparatus used by him is very simple and inexpensive—a large-mouthed bottle, holding about 250 grammes, the mouth closed by a cork pierced with two openings; in one, a vertical glass tube, very thin at its lower end; in the other, a glass tube bent at an angle, its one end at the bottom of the bottle; and the other affixed to a rubber tube of about twenty centimeters, having a glass mouthpiece. The medicated liquid occupies the lower portion of the bottle, and when the patient inhales through his mouthpiece, the external air thus solicited travels through the layer of liquid, and comes to the patient freighted with the vapors of the medicament. His formula is as follows:

Iodoform (pulverized),	1 grm., 50 ctgrms.
Essence of turpentine,	50 grms
Oil of arachides, (American earth-nut).	150 to 200 grms.
Essence of Bergamot,	2 grms., 50 ctgrms.
Thymic acid,	2 grms., 50 ctgrms.

The oil in the mixture emulsifies the iodoform without destroying its volatility, and lessens the susceptibility of the mucous membrane against the two irritating qualities of the turpentine. The inhalations seem to have good effect in diminishing the cough and lessening the expectoration and removing its fetidness.—*Progres Medicale.*

BOWDITCH'S FORMULA FOR IRREGULAR HEART.

In a discussion upon heart-disease before the Boston Society for Medical Improvement, Prof.

Bowditch said that he had found the following formula of great service in relieving even the most serious cardiac affections. He had used it for the last twenty-five years. ℞ Pulv. digitalis, gr. x; pulv. colchici sem., gr. xx; sodii bicarbonatis, gr. xxx; M. et div, in pil. No. xx. These are to be taken three or four times daily at first; subsequently to be reduced until only one is taken at bedtime; the treatment to be continued for three to nine months.—*Boston Medical and Surgical Journal.*

GONORRHŒA EASILY CURED.

By Z. T. Dellenbaugh M.D., of Cleveland Ohio.

Founding an opinion on the recent text books and treatises on this disease, one would imagine there had been little, if any, progress in its treatment. The young practitioner, without practical experience, who undertakes the management of gonorrhœal cases by the plan of treatment generally recommended in these works, with nauseating mixtures and conglomerate injections, will certainly be discouraged, and find his cases dragging along, or quit him, to become rounders. In cases of acute gonorrhœa I have, for eight or ten years, used carbonate of lithia to alkalinize the urine, and find the five-grains compressed tablets, one taken three times daily, very convenient, fulfilling every indication better than any other salt. I now rarely find it necessary to give any other remedy internally.

Should the case fail to respond to the following injection, and not show marked improvement in two or three days, two sandalwood oil capsules may be given, three times daily, for three or four days. The injection I have used in cases of acute and sub-acute gonorrhœa for more than a year with the most gratifying results, especially to the patients, who have recovered in from two to seven days, and paid me from one to three visits, is the following:

℞	Resorcin,	ʒ j,
	Acid boracic,	gr. xx,
	Zinci acetatis,	gr. ¼-½,
	Aqua destillat.,	℥ iv. M.

Of this solution two teaspoonfuls are injected three times daily. The germicides, resorcine and boracic acid, are so slightly astringent, that it requires the additional zinc salt to restore capillary tonicity. This injection is quite or nearly painless.

In the treatment of the later stage of sub-acute and chronic gonorrhœa, without stricture or granuloma as a complicating factor, I have had the happiest results follow the use of the following injection:

℞	Hydrargyri chloridi corrosivi,	gr. ¼-ss.
	Rinci chloridi,	gr. ss-j,
	Aqua distillat.,	ʒ viij. M.

Sig.—A tablespoonful to be injected well down into the urethra, three-times daily.

Corrosive sublimate injections are by no means a recent addition to the list. The rationale of their use, however, is recent. As in the injection for acute cases, the germicidal constituent must be so sparingly used (otherwise it produced great pain and reactive inflammation), that I find it very advisable to combine a more astringent sa t; and the chloride of zinc is the one I have selected for obvious reasons. Without doubt, a mild injection of corrosive sublimate and chloride of zinc is destined to be the injection for sub-acute and chronic gonorrhœa.—*College and Clinical Record.*

BORAX IN THE TREATMENT OF IMPACTION OF CERUMEN.

Dr. George F. Sowers (*Medical and Surgical Reporter*) gives the following formula for dissolving impacted cerumen, so that it can be removed with the syringe:

℞	Sodii boratis, pulv,	ʒ j,
	Glycerine,	
	Aqua, aa	ʒ ij. M.

Sig.—Warm, and drop into the ear. After it has liquefied the cerumen, use syringe and tepid water.

OBSTETRIC APHORISMS.

The following aphorisms have been revived from Dr. Blundell's lectures on midwifery. The quaintness of the language may interest as much as the directions may instruct:

"Aph. 1. *The Rude Midwifery is a Bloody Idol.*—Floodings, tremendous lacerations, inversions of the uterus, like those which now stand on the table before you. Such are the effects of obstetric violence, that unsatiate and gory Moloch, before whose bloody shrine so many thousands has been sacrificed, to be succeeded, in future years, by still more numerous victims.

Aph. 2. *That the Placenta is to be Seduced.*—Do not haul out the placenta; do not jerk out the placenta, do not tear out the placenta, leaving unobserved one-half of it in the cavity of the uterus. Do not lacerate and leave the membranes to form afterwards a receptacle for clots, or to alarm the patient by their unexpected appearance. *Arte non vi* must, as usual, be your device: lead, coax, seduce.

Aph. 3. *Do not go Away and Leave a Second Child Behind.*—I am afraid that some one here present, notwithstanding the cautions of the morning, will hereafter remove the placenta when there is another fœtus in the uterus. He smiles, he bows, he retires; another child is born. Which of you all means to signalize himself by this dangerous folly?

"Aph. 4. *That by Removing the Placenta Asleep You may Invert the Uterus.*—Practitioners have sometimes unconsciously inverted the uterus,

leaving it in that condition, an accident which can never happen to you, provided you forbear to remove the placenta till the womb be contracted. You may, however, drowse sometimes on the bedside as on these benches, and in these torpid and forgetful moments carelessly abstracting the placenta, inversions may occur.

"Aph. 5. '*An Accoucheur's Atrocious Member.*—Depend upon it if you do carry your hand in the uterus, on every occasion, to get away the placenta, some woman will die at last, and die the victim of your mismanagement. At this moment, perhaps, some amiable but ill-fated creature blooms, the life and light of her admiring circle, who must hereafter fall an untimely sacrifice to some cruel and ruthless arm now drowsily crossed in this theatre. Which of you is the owner of this atrocious member?

"Aph. 6. *Three Places where the Atrocious Member must not be Put.*—(Dr. Blundell shows preparation.)—Do not needlessly thrust the hand into the uterus; that is the voice that issues from this preparation. He that hath ears to hear, let him hear it!

"Do not needlessly thurst the hands into the vagina; that is the voice that issues from this preparation. He that hath ears to hear, let him hear it!

"Do not needlessly pass the hand into the genital fissure; that is the voice that issues from this preparation. He that hath ears to hear, let him hear it!

"Ah! the violence of an ignorant and savage hand.

"After examining these preparations, tell me is it too much to assert that in obstetrics a thrust of the hand is more dreadful than a thrust of the bayonet? Could the field of Waterloo exhibit injuries more dreadful than these?

Readers of Swain's "aphorisms" can compare and note the difference of style. Dr. Blundell's pupils must have been somewhat different from the young gentlemen of the present day.—*The Medical Age.*

INFANTILE CONSTIPATION.

In connection with the means of overcoming this troublesome condition, that we have recently noticed, the following suggestions of Dr. M. C. Hatton (*Lancet*, July 14 1883) may prove serviceable:

Take one quart of bran meal, tie it up in a pudding-bag so tight as to get a firm, solid mass, put it into a pot of water early in the morning, and let it boil till bed time, then take it out and let it dry. In the morning peel off from the surface and throw away the thin rind of dough, and with a nutmeg grater grate down the dry hard mass into a powder. Of this, from one to three teaspoonfuls may be used, by first rubbing it into a paste with a little milk, then adding to it about a pint of milk, and, finally, bringing the whole to just the boiling point It must be given through a nursing-bottle.—*Med. and Surg. Reporter.*

ADMINISTRATION OF COD-LIVER OIL TO CHILDREN.

The following hints on this subject, from Dr. Edward Ellis's authoritative work on *Diseases of Children* deserve to be noted by our professional friends.

The secret of giving cod-liver oil successfully is *not to give too much*, and to give it at the right time. Small quantities are best to begin with (a few drops for a very young child; ℥ ss.–℥ i. for older ones), in orange-wine, or a little weak nitro-muriatic acid in water, well sweetened. It should be given so as not to clash with meals, or soon after a meal: if before, it spoils the appetite. Bed-time is a good time, when it causes sickness; the child lying down immediate afterwards, it is usually well retained. When it causes diarrhœa, and often in rickets, I give it with equal parts of lime-water. A little iodide or phosphate of iron may be dissolved in it, or a little phosphorus, when the administration of that drug is desirable. As an external application to many obstinate forms of eczema capitis and other cutaneous diseases, I have found it extremely valuable. If necessary, it may be made into an ointment, as,—

℞. Ol. morrhuæ.....	℥ ss.
Liquor. potassæ.....	℥ ss.
Adipis	q.s.

Ft. unguentum. (Dr. Neligan).

When cod-liver oil cannot be tolerated, glycerine and cocoanut-oil are the best substitutes. They should be given in doses of ℥ i.–℥ ij. two or three times a day. I have tried the Dugong oil, but do not think that it possesses any special merit, nor yet the cod-liver oil emulsions, jellies, etc. I much prefer the plain oil. Some bear the light-brown kinds well, others prefer the pale. Burgundy or claret make good vehicles for cod liver oil. Or it may be given sandwich fashion, in a little brandy and water at the bottom of the glass; then floating the oil, wetting the side of the glass with brandy and water, and finally pouring a little *rather* stronger over the top of the oil, will make it slip down tastelessly. Ice in the oil also renders it nearly tasteless. If the oil be thick from cold weather, it should be warmed and made clear before administration. As a rule, children get to *like* it without artificial means of any kind: I am therefore merely supplying hints for possible difficulties.

THE CANADA MEDICAL RECORD

A Monthly Journal of Medicine and Surgery.

EDITORS:

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SUBSCRIPTION TWO DOLLARS PER ANNUM.

All communications and Exchanges must be addressed to the Editors, Drawer 356, Post Office, Montreal.

MONTREAL, APRIL, 1884.

There are, we believe, certain obligations due by Professors of Medical Schools towards each other as well as toward Schools other than their own, which no amount of rivalry should render inoperative. The reputation of every Medical College for fairness in dealing with its pupils is the basis upon which its success must rest. Both of these are axioms which we believe will be generally admitted as correct. Such, at all events, being our opinion, it was with very deep regret that we early this month saw in the Montreal Daily *Star* a very serious accusation brought against certain members of the Montreal Faculty of Medicine of Victoria College by Dr. E. P. Lachapelle, Secretary of the Laval Faculty of Medicine in this city. The charge was, that questions on two subjects of the written examination, had reached the students before the commencement of the examinations, while on some other subjects hints had been given students —of the subjects they were likely to be examined upon. Dr. Lachapelle, becoming aware of these facts, placed the evidence in the keeping of a gentleman, and on the conclusion of the examinations was of course able to verify the correctness of the information, of which he had become possessed. We are of course bound to say that, so far as we can judge, the statement of Dr. Lachapelle is borne out, and that, in some way, and on certain subjects, the students of Victoria College became aware on what they would be examined. This seems to be a fact, but it is one that does not by any means, of necessity, incriminate even those whose questions came into Dr. Lachapelle's hands anterior to the examinations. It is not now that we have heard for the first time of written questions having fallen into the hands of students before examination day. If we are correctly informed, two other Medical Schools in Montreal have suffered each once, in this way; one certainly has to our knowledge and this in spite of the best possible precaution to prevent it. The result in one School has been the abolishing of printed questions, they now being given to the students in writing. We also, years ago, were informed that similar misfortunes had attended examining boards in the Old World. But so far as we know, this is the first time that the questions have fallen, previous to the examination, into the hands of a professor of a rival school, and we are bound to say that that Professor has not, in our opinion, acted in the matter as he should have done. It is true that the struggle which has so long existed between Laval and Victoria, has embittered feeling between the two schools. This fact does not, however, relieve the Professors of either school from the duty of protecting the good name of whichever may be assailed. The good name of a Medical School should be the common property of the entire profession. Becoming possessed of the information which he did, we think it was Dr. Lachapelle's duty, to have at once communicated with the President of the Victoria Faculty, and prevented the completion of a scandal. Dr. Lachapelle may say that, had it only been questions which came into his possession, he might have thus acted, but as he likewise learned that *hints* had reached the class as to what they would be examined upon he could not treat them in this way; we think he could, and that he should. He ought to have remembered, even that were all true of which he accused them, still a large portion of the Faculty were not concerned, and to them at least, some of whom were his *confrères*, when he was in the Faculty, he owed an obligation which we regret he did not recognize. So far as we can see, Dr. Lachapelle does not gain anything by the course he chose to adopt. If he had communicated his knowledge to the Faculty of Victoria, the guilty, if guilty there was, could have been discovered by them and the assessors *at the time* of the examination. In this way a scandal might have been prevented, and possibly much subsequent trouble saved to the graduating class. We fear, however, that Dr. Lachapelle allowed his feelings to outweigh his judgment, causing him to act in a way which we hope and believe, on reflection, he will regret. Within a few days, a correspondence between Dr. Desjardins, Secretary of a Committee of Victoria Professors (consisting of gentlemen not implicated) appointed to investigate the charges, and Dr. Lachapelle, has appeared in the *Star*. It is too lengthy to insert, or even to give a resumé of. One point, which, however, is the pivot,

we will allude to. Dr. Desjardins asks on behalf of the Committee that they be allowed to take *cognizance* of the proof, in his, Dr. Lachapelle's, possession. This he declines to do but offers to lay them before a Parliamentary Committee. Here, again, we think Dr. Lachapelle wrong. We do not believe there is any necessity for such a Committee. If investigation is needed, and in the present position of matters, it must take place, the College of Physicians and Surgeons is the proper tribunal to take the matter up. In the keeping of that body is the honor of the entire profession and on them devolves the duty of seeing that the examinations are properly conducted. But the Faculty of Victoria, knowing that the first investi gation should commence with themselves, acted promptly by appointing a committee consisting of gentlemen not concerned in the accusations. With out cognizance of the evidence promised by Dr. Lachapelle the work of this committee is rendered almost useless. If justice is simply what he desires he should facilitate every means used to that end. We fear, however, that the whole story is but, another act in the drama of Laval *vs.* Victoria, which we hope, for the sake of our professional *entente cordiale* will soon be brought to a close.

McGILL UNIVERSITY—ANNUAL CONVOCATION.

The annual convocation of the Medical Faculty of McGill University took place on the 29th March, in the William Molson Hall, which was crowded to overflowing. The proceedings were opened with prayer by the Ven. Archdeacon Leach.

Hon. Justice Mackay occupied the chair, and delivered an able address respecting the late Chancellor of the University, Hon. Justice Day :—

Dr. Howard, Dean of the Medical Faculty, then read the awards of prizes and honors in medicine, as follows :—

The total number of students registered in this Faculty during the past year was 207, of whom there were from Ontario, 110; Quebec, 49; Nova Scotia, 5; Manitoba, 1; New Brunswick, 22; Prince Edward Island, 5; Newfoundland, 2; West Indies, 3; United States, 10.

The following gentlemen, 40 in number, have passed their Primary Examination on the following subjects: Anatomy, Practical Anatomy, Chemistry, Practical Chemistry, Materia Medica and Pharmacy, Institutes of Medicine, and Botany and Zoology. Their names and residences are as follows :

J. H. Armitage, Newmarket, O.; H. S. Birkett, Hamilton, O.; D. A. Cameron, Strathroy, O.; D. Corsan, Woodstock, O.; J. L. Clark, Waterloo, Q.; M. A. Craig, Glen Water, O.; W. C. Crocket, B. A., Fred'ton, N.B.; W. W. Doherty, Kingston, N.B.; John L. Duffett, Leeds, Q.; John Elder, B.A., Huntingdon, Q.; Thos. M. Gairdner, Bayfield, O.; J. B. Gibson, Cowansville, Q.; Geo. J. Gladman, Lindsay, O.; J. H. Y. Grant, Ottawa, O.; Smith Gustin, London, O.; P. H. Hughes, Strathroy, O.; John A. Kinloch, Montreal, Q.; Ed. P. McCollum, Duart, O.; W. J. McCuaig, Vankleek Hill, O.; H. J. McDonald, Alexandria, O.; Thos. G. McGannon, Prescott, O.; J. W. McMeekin, Chesterfield, O.; J. M. McKay, River John, N.S.; Guy F. Palmer, Ottawa, O.; Alf. T. Platt, Picton, O.; N. G. Powne, Nashville, Tenn.; W. P. Pringle, Cornwall, O.; C. H. Raymond, B.A., Springfield,; A. Raymond, Moulinette, O. N.B.; F. D. Robertson, Lennoxville, Q.; W. M. L. Rowat, Manotic, O.; A. T. Schmidt, Faribault, Minn. F. J. Seery, Fredericton, N.B. W. A. Smith, Montreal, Q.; A. Russell Turnbull, Russell, O.; W. W. White, B.A., St. John, N.B.; F. J. White, Green's Pond, Nfld.; Charles Wilson, Cumberland, O.; D. J. Wishart, B. A., Madoc, O.; A. N. Worthington, Sherbrooke, O.

The following gentlemen, 34 in number, have fulfilled all the requirements to entitle them to the degree of M.D., C.M., from the University. In addition to the primary subjects, as mentioned above, they have passed a satisfactory examination, both written and oral, on the following subjects: Principles and Practice of Surgery, Theory and Practice of Medicine, Obstetrics and Diseases of Women and Children, Medical Jurisprudence and Hygiene, and also Clinical Examinations in Medicine and Surgery conducted at the bedside in the hospital :—

J. L. Addison, West Flamboro, O.; Jos. A. Barrett, Fenagh Vale, O.; Hy. J. Clarke, Pembina, Dakotah.; John R. Church, Aylmer, Q.; Sheldon E. Cook, Aultsville, O.; T. B. Davies, New Edinburgh, O.; John A. Duncan, Duncanville, O.; E. J. Elderkin, Apple River, N.S.; W. A. Ferguson, B.A., Richibucto.; C. E. Gooding, Barbadoes, W.I.; Geo. A. Graham, Hamilton, O.; Jas. A. Hutchison, Goderich, O.; C. H. Johnson, Almonte, O.; W. G. Johnston, Sherbrooke, Q.; Patrick N. Kelly, Rochester, Minn.; Thos. H. Landor, London, O.; J. H. McLellan, Summerside, P.E.I.; J. P. McInerney, Kingston, O.; Wm. McClure, B.A., Lachute, O.; G. N. McLean, B.A. Pictou, N.S.; John C. Meahan, Bathurst, N.B.; David B. Merritt, B.A., Ottawa.; W. M. F. Nelson, Montreal, Q.; Timothy O'Brien, Brudenell, O.; Wm. Porteous, Pembroke, O.; W. Scott Renner, Jordan Station, O.; L. D. Ross, Montreal, Q.; Geo. B. Rowell, Abbotsford, Q.; R. F. Ruttan, B.A., Napanee, O.; E. H. Smith, Prescott, O.; W. A. De W. Smith, Montreal, Q.; H. E. Smyth, Worcester, Mass.; Felix D. Walker, Launching, P.E.I.; S. F. Wilson, M.A., Springfield, N.B.

Medals, Prizes and Honors.

The Holmes Gold Medal for the best examination in the Primary and Final branches was awarded to Wm. A. Ferguson, B.A., of Richibucto, N.B.

The prize for the best final examination was awarded to Jas. P. McInerney, of Kingston, N.B.

The prize for the best Primary examination was awarded to Smith Gustin, of London, Ont.

The Sutherland Gold Medal was awarded to John Elder, B.A., of Huntingdon, Q.

The following gentlemen, arranged in order of merit, deserve honorable mention :—

In the Primary Examination—N. G. Powne, H. S. Birkett, J. A. Kinloch, J. Elder, B.A., W. W. White, B.A., W. J. McCuaig, W. C. Crockett, B.A., G. H. Raymond, B.A., John L. Duffet, C. W. Wilson, F. J. Seery, Geo. B. Rowat, A. R. Turnbull, E. P. McCollum, and G. F. Palmer.

In the Final Examination—Geo. A. Graham, R. F. Ruttan, Wyatt D. G. Johnson, Edwin J. Elderkin, and Thos. B. Davies.

Professors' Prizes.

Botany—Prize, N. E. Powne, of Nashville, Tenn. For the best collection of plants—Prize, J. E. Gray, of Coldstream, Ont.

Practical Anatomy—Demonstrator's Prizes : 2nd year, H. S. Birkett, of Hamilton, Ont. 1st year, D. L. Ross, of Winthrop, Ont.

Pathology—Prize awarded to Edwin C. Wood of Londesboro, Ont. ; and honorable mention to Fred. G. Finlay, Montreal, Q.

The degrees were then conferred by the Ven. Archdeacon Leach.

Dr. J. P. McInerny, of Kingston, Ont., delivered the valedictory address on behalf of the graduating class.

Prof. Geo. Ross, A.M., M.D., delivered the address to the graduating class.

Dr. Howard, Dean of the Faculty, announced the successful completion of the Campbell Memorial Fund, amounting, all told, to about $53,000, and with the amount given by the Hon. D. A. Smith, bringing it up to $103,000. He also announced that Mr. George Stephen, President of the Canadian Pacific R. R., had given $50,000 to the Montreal General Hospital to build a Campbell wing.

The convocation then adjourned.

BISHOP S COLLEGE.—ANNUAL MEDICAL CONVOCATION.

List of Graduates.

The Annual Convocation of the Faculty of Medicine of the University of Bishop's College was held on the 3rd of April, in the Synod Hall, and despite the unfavorable state of the weather there was a large atttendance of the relatives and friends of the students. The proceedings commenced at three o'clock. Mr. R. W. Heneker, Q.C., Chancellor of the University, occupied the chair, and among those present were noticed Dr. F. W. Campbell, Dean of the Faculty ; Dr. J. C. Cameron, Registrar of the College ; Rev. Canon Norman, Mr. L. H. Davidson, Dr. J. Baker Edwards, Dr. R. A. Kennedy, Dr. Perrigo, Dr. J. B. McConnell, Dr. C. A. Wood, Dr. Armstrong, Dr. T. Simpson, Dr. Young, Dr. Trenholme, Dr. Foley, Dr. H. L. Reddy, Dr. A. L. Smith, and others.

Chancellor Heneker opened the proceedings by a very interesting and instructive address, after which Dr. F. W. Campbell, Dean of the Faculty, then read the results of the session which are as follows :

Report of Session 1883–4.

The number of matriculated students for the session of 1883–4 is 38, being seven in excess of last year. Of this number, 2 come from the United States, 2 from Ontario, 2 from New Brunswick, 2 from the West Indies, 1 from British Guiana, and 22 from the Province of Quebec. Thirteen of our students are residents of Montreal.

The following are the results of the examinations :—

Botany—William E. Fairfield, of Clarenceville (prizeman) ; Rollo Campbell, Montreal ; Albert E. Phelan, Montreal ; Frederick M. Stevens, Dunham ; Rufus K. Curlett, Belleville ; John M. Rohlehr, New Amsterdam, British Guiana.

Practical Chemistry—Albert F. Longeway, J. H. Chapman and A. E. Phelan, equal ; B. J. Ambrose.

Practical Anatomy—Seniors—Albert F. Longeway, prize, and Charles E. Parent. Juniors—R. K. Curlett, prize.

Anatomy—1st class honors—Albert F. Longeway, C. E. Parent. 2nd class honors—Cornelius Ulric, William A. Mackay. Passed—W. G. Nichol, S. Riopel, E. O. Laferriere, J. F. Gore.

Physiology.—1st class honors—F. R. England. 2nd class—S. Riopel. Passed—C. Ulric, J. F. Gore.

Materia Medica and Therapeutics.—1st class honors—F. R. England; 2nd do, S. Riopel. Passed—J. F. Gore.

Chemistry—1st class honors—F. R. England, A. F. Longeway, S. Riopel and R. J. Ambrosse. 2nd class—F. J. Nelson. Passed—J. F. Gore.

Hygiene—1st class honors—A. F. Longeway and S. Riopel. Passed—E. O. Laferriere; equal, J. F. Gore, D. McNamara and C. H. Lafontaine.

Medical Jurisprudence—1st class honors—F. R. England and C. E. Parent; equal, E. O. Laferriere, C. Ulric and J. R. Charest. Passed—D. McNamara, W. D. Nutter and W. G. Nichol.

The following gentlemen have passed their primary examination, consisting of anatomy, physiology, materia medica and therapeutics, chemistry, hygiene, practical anatomy, and practical chemistry:—F. R. England, Dunham, P.Q., 1st class honors, and "David Scholarship" (awarded to the student who takes the highest number of marks in the primary examination); C. E. Parent, Waterloo, 2nd class honors; S. Riopel, Valcartier; 2nd class honors; W. G. Nichol, Montreal, 2nd class honors; E. O. Laferriere, St. Cuthbert; J. F. Gore, Stanstead.

The following gentlemen have passed their final examination for the degree of C.M., M.D., consisting of practice of medicine, surgery, obstetrics and diseases of children, gynecology, pathology, medical jurisprudence, clinical medicine and clinical surgery:—Ernest E. Bronstorph, Jamaica, W.I., 1st class honors, and "Wood gold medal" (awarded to the student who has attended at least two six-months sessions at Bishop's College, and has obtained the highest aggregate marks in primary and final examinations). Rollin C. Blackmer, Clinton, Vt., 1st class honors, "Chancellor's Prize," for best final examination, the Wood gold medalist not being allowed to compete; Charles D. Ball, Stanstead, P.Q., 1st class honors; Solomon Riopel, Valcartier; Charles H. Lafontaine, Chambly, P.Q.; Wm. Patterson, Montreal; Wm. H. Drummond, Montreal; Wm. A. Mackay, St. Eustache; John F. Gore, Stanstead, P.Q.; James Ogilvie, Jamaica, W. I.

The "Robert Nelson" gold medal for special excellence in surgery is awarded to E. E. Bronstorph, Jamaica, West Indies. This medal valued at $60.00, founded by Dr. C. E. Nelson, of New York, is awarded annually to the student standing first in a special examination in Surgery, written, oral and practical. No one is allowed to compete unless he has attended at least two sessions at Bishop's College, and has attained first-class honors in all subjects, both primary and final. In order to pass in any subject, a candidate must obtain at least 50 per cent. of the maximum marks; to obtain 2nd class honors, at least sixty per cent.; and to obtain 1st class honors, at least seventy-five per cent.

PRIZE LIST.

Wood gold medal and Nelson gold medal—E. E. Bronstorph; Chancellor's prize—R. C. Blackmer; David scholarship—F. R. England. Practical anatomy—Senior prize—A. F. Longeway; Junior prize—R. K. Curlett. Botany prize—W. E. Fairfield.

In conclusion I am happy to say that the thirteenth session just closed has been one of hard and steady work. We have never had a more faithful and industrious class of students, and in consequence the results of examination have been unusually high (Loud applause.)

At the conclusion of the list, the oath of allegiance was administered to the students who were British subjects by Chancellor Heneker, after which the national anthem was sung.

The conferring of the degrees of M.D., C.M. upon the successful graduates was then proceeded with, Dr. Cameron administering the oath, after which the diplomas were presented by the chancellor.

Dr. Drummond then delivered valedictory address on behalf of the graduating class.

Dr. Simpson addressed the graduating class on behalf of the Faculty, and after an eloquent address from Mr. L. H. Davidson the proceedings terminated.

PERSONAL.

Dr. Ernest Bronstorph (C.M., M.D., Bishop's, 1884; Wood & Nelson Gold Medalist), of Kingston, Jamaica, sailed for London, by the Allan

SS. Parisian, from Halifax, April 19th. Dr. Bronsorph will remain some time in London, and after taking out a London qualifiction returns to settle in Jamaica.

Dr. Roddick, Professor of Clinical Surgery, McGill College, has returned to Montreal, after an absence of six months in Europe.

Dr. Mackay, (C.M., M.D. Bishop's, 1884), has settled at Bristols Corners, Pontiac Co., Quebec.

Dr. Henderson, of Calgary, N.W.T., was in Montreal for a few days early this month.

REVIEWS.

A Pocket Book of Physical Diagnosis of the Diseases of the Heart and Lungs for the Student and Physician. By EDWARD T. BRUEN, Demonstrator of Clinical Medicine in the University of Pennsylvania, etc., etc. Second Edition revised, with additional illustrations. Philadelphia: P. Blakiston, Son & Co.

This is a compact little volume of rather more than two hundred pages, in which the subject is treated in as practicable a manner as possible, without discussion of questions of historical or theoretical interest, and, according to its author, without laying special claim to originality of matter. It is just such a book as should always be within easy reach in the Physician's Library. We need not say more to recommend it to our readers.

A Treatise on Bright's Disease of the Kidneys, its Pathology, Diagnosis and Treatment, with chapters on the Anatomy of the Kidney, Albuminuria, and the Urinary Secretion. By HENRY B. MILLARD, M.D., M.A., with numerous original illustrations. New York: Wm. Wood & Co., 1884.

The rapid increase in the number of cases of Bright's Disease met with by almost all Physicians tends to throw around this disease more than ordinary interest. Why this increase should exist is a subject which has given rise to much thought, and the general opinion seems to be that the intense nervous strain which business now-a-days demands is a prolific cause. Dr. Millard has gone into the consideration of this disease in a very thorough and scientific manner—perhaps the last a little too much so, for the mass of practitioners. This is a good fault, perhaps—if fault it be—because it is only by thoroughly scientific investigation, a malady, in many respects so obscure as to its precise cause, can be unravelled. The practical part of the book is the treatment, and this is very fully described. It is a work which will amply repay perusal by any thoughtful student.

The Essentials to Pathology. By D. TODD GILLIAM, M.D., Professor of Physiology in Starling Medical College. Philadelphia, P. Blakiston, Son & Co.

This is an excellent little work for medical students, its object evidently being to unfold to the beginner the fundamentals of pathology, in a plain, practical way, and, by bringing them within easy comprehension, increase his interest in the study. We advise all teachers on Pathology to recommend it to their class.

History of the Circulation of the Blood. By HENRY C. CHAPMAN, M.D., Professor of Institutes of Medicine and Medical Jurisprudence in Jefferson Medical College, Philadelphia. P. Blakiston, Son & Co., Publishers: Philadelphia, 1884.

This little work of between fifty and sixty pages, is a lecture delivered by Professor Chapman, concluding a course on the circulation. Dr. Chapman has dealt with his subject in a pleasant way, and the matter is pleasant, as well as instructive reading. He shows that although Harvey's name is justly associated with the discovery of the circulation, that to others some portion of credit is due. These he brings to the front, and apportions to each that share in the great discovery which is their due. He therefore divides the discovery into six different stages—as follows:—

1. The Structure and Functions of the Valves of the Heart, Erasistratus, B. C. 304.

2. The Arteries Carry Blood during Life not Air, Galen, A. D. 165.

3. The Pulmonary Circulation, Servetus, 1553.

4. The Systemic Circulation, Cæsalpinus, 1593.

5. The Systemic and Pulmonic Circulation, Harvey, 1628.

6. The Capillaries, Malpighi, 1661.

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CLINICAL LECTURE ON HÆMORRHOIDS.

Delivered at the Montreal Dispensary.

By A. Lapthorn Smith, B.A., M.D., M.R.C.S Eng., Professor of Botany, Bishop's College, Medical Faculty.

Gentlemen,—Owing to the enormous increase in the number of patients attending this institution, I deem it my duty to make some use of such a vast amount of material for your benefit, by calling your attention by means of a series of short clinical lectures to certain classes of cases which we have frequent opportunities of observing here, and which in a few years from now, when you are immersed in private practice, you will be most frequently called to attend, without perhaps having the time to devote to their study. I claim for these every-day diseases a fair share of your attention, for it is they and not the case of extreme rarity which will form the bulk of your practice and the foundation of your reputation.

The subject I have chosen for my first lecture is Hæmorrhoids, or in Anglo-Saxon, piles, and at the very outset let me put you on your guard against a common source of error. Patients frequently make mistakes as to the diagnosis of their complaint, even when the malady is situated in a locality which they can readily observe. Still more is this the case when, as with piles, the disease is situated in a part which it is difficult to see and examine. You will see patients coming here suffering from every different affection the rectum and anus are heir to, and yet, they will nearly all tell you, without any hesitation, that they are troubled with piles, and many of them will deem it an unnecessary liberty we are taking, when we ask them to let us see the piles. The personal and thorough examination of every case of the kind is a most necessary precaution as will be shown by recalling the following case which many of you may remember:—Pete McN., aet 19, exceeding pale and weak in appearance, came here a few months ago complaining of bleeding pilest He said whenever he had a motion which was a somewhat rare occurrence, as his bowels were always confined, the piles would come down and bleed profusely, sometimes to the extent of nearly a pint. When they came down he could feel a round lump, which was not very painful, but bled freely. We immediately examined his anus, but found nothing abnormal; neither did the use of the rectal speculum reveal any appearance of internal piles. But on removing the speculum I introduced my finger, and at once detected a pear-shaped polypus about the size of a cherry hanging by a long pedicle from the wall of the rectum about two inches up. I pulled this highly vascular tumor down, placed a ligature around the pedicle, and returned it to the rectum, whence it was passed a few days later. He has had no bleeding since, and having rapidly regained his strength, has returned to his occupation, which he had been obliged to relinquish for over a year.

John R., aet 22, came a few weeks ago complaining of piles, which he diagnosed as of the itching variety. On examining him, however, we could find no trace of piles, but we did find a number of little white squirming worms about half an inch long, and looking like bits of thread endowed with

life. These were the oxyuris vermucularis, or ascaris vermucularis, which give rise to intolerable itching about the anus and even tenesmus.

One other case, Mr. W., aet 40, came to be treated for piles, which however, proved to be eczema of the anus.

Do not be misled either by the patient telling you that they have been doctored for piles for several years. In nine cases out of ten enquiry proves that the doctor was himself and the treatment consisted in the liberal application of the numerous quack ointments so generally advertised, while in the tenth case the M.D. who attended them failed to diagnose the disease before treating it.

Never, therefore, undertake the treatment of a case about the anus or rectum until you have made a thorough examination and certain diagnosis.

With these words of warning let me remind you that piles are essentially enlarged hæmorroidal veins, surrounded by infiltrated cellular tissue. They are either situated outside the anus and are covered with skin and called external, or they are situated inside the sphincter, covered with mucous membrane,and are called internal. If you remember the vascular supply of the lower end of the bowels, a great deal of light will be thrown on the nature and cause of piles. The rectum and anus receive their blood supply from three principal sources; the upper third is supplied from the superior hæmorrhoidal, a branch of the superior mesenteric artery; the corresponding vein for which empties into the vein of the same name; the middle third receives its vascular supply from inferior mesenteric artery, and this vein,like the previous one being a branch of the portal system, its blood has to go through the liver; but the lower third, including the anus, receives its supply from the inferior hæmorrhoidal, a branch of the internal pudic, and the blood from it returns by the vein of the same name into the internal iliac and vena cava inferior, and does not go through the liver, not having anything to do with the portal system. From this you will readily understand that anything obstructing the return of blood from the portal vein or any of its branches, such as a hard contracting liver or a plug of hard fœcal matter pressing on the delicate walled veins in the internal tube would dam back the blood in the superior and middle hæmorrhoidal veins, which, being distended and subsequently inflamed, would become very painful and bleed when pressed upon by a hard peice of feces, giving bleeding internal piles. While anything preventing the free return of blood by the inferior vena cava, such as a distended right aurical from heart disease or pressure upon the inferior vena cava from an enlarged liver, or pressure on the internal pudic vein, as it passes over the spine of the ischium by sitting for many months on a soft cushioned chair; the soft cushion following the vein into the protected channel nature had made for it. Any of these cases would produce external piles because they would prevent the free return of blood from the inferior hæmorrhoidal veins.

Bleeding is much more frequent from the internal variety than from the external, because the veins are much better supported and covered by the skin in the latter.

In some of the cases I have had, the bleeding was very profuse, indeed in such large quantities that the pallor of the cheeks, the weakness of the voice and step, and the apathy and general debility, attested that a large portion of their blood had been drawn off, and was only replaced with water, the blood in these cases being generally of a dark color showing that the vein itself had burst.

In a few of the cases the bleeding was also copious but of a bright red color coming from the laceration of one of the enlarged arteries of the inflamed mucous membrane covering the distended vein.

In the remaining and perhaps most frequent cases, the bleeding came from engorged capillaries and was small in quantity.

As piles are nothing more or less than varicose veins of the rectum, they are produced by the same causes as produce varicose veins of the legs. Thus they are both frequent in pregnant women, because the enlarged uterus compresses the internal or common iliac veins; they are also rarely absent. from heavy drinkers, both because alcohol changes the normal condition of the liver and because moreover, the walls of the veins and heart are relaxed and weak.

One of the first instruments I would recommend you to purchase in starting practice is a rectal speculum. This one made on the same principle as a Fergusons vaginal speculum, but with a slit down one side is the one I prefer. There is another very good one somewhat larger than this, but with the addition of a glass side in the opening, which

can be with-drawn after the speculum has been introduced.

I shall conclude with a few words as to treatment. This may be either medical or surgical, or both. The medical treatment consists in regulating the bowels, diminishing the engorgement of the liver, and in remedying as far as possible the defects in the general circulation. In over-coming constipation, you must carefully avoid anything approaching a purgative, which in the atonic or relaxed condition of the intestine would cause prolapsus and with intense pain. More especially should you avoid aloes which as you are aware acts more especially on the lower part of the bowels and causes congestion of the pelvic organs. Castor oil and sulphate of magnesia should not be given as they irritate the rectum.

On the contrary only the mildest laxatives should be employed. My favorite in these cases is the confection of Black Pepper which gives almost immediate relief when taken in a dose of 1 or 2 teaspoonful every night. Another very mild laxative is a mixture of equal parts of cream of tartar and sulphur, rubbed into a paste with syrup and taken in the same quantity. The compound liquorice powder of the German Pharmacopœia consisting of powdered senna and powdered liquorice of each 2 parts; powdered fennel and sulphur, of each 1 part and white sugar 6 parts. Where there is congestion of the liver you will find prodophyllin in the dose of ¼ to ½ a grain in pill form every night, a mild and safe remedy. You can also do much for this class of patients by recommending a suitable diet, in which fruit and vegetables should enter largely; they are nature's laxatives.

You must also warn them against drinking decoctions of tea which containing a considerable quantity of tannin, dry up the secretions of the intestines, allowing those hard plugs of fecal matter to form which press upon the veins and cause them to be distended.

For reasons already mentioned the use of alcohol should be discouraged.

The surgical treatment may be either palliative or curative. The former consists in the local application of anodyne and astringent ointments and injections. The best of these and the one I invariably use is the unguentum gallæ cum opio. It is always soothing, and when employed in conjunction with remedies which keep the contents of the bowels semi liquid, it will almost seem at times to be curative.

When there is much bleeding a lump of alum cut into the shape of a suppository may be inserted, or an enema of a 20 grains to the ounce solution of persulphate of iron will generally control the hemorrhage.

Among the curative surgical measures one of the best, least painful and safest is the injection of carbolized oil, equal parts of each with a hypodermic syringe into the distended vein which forms the pile.

When piles are internal and not readily brought down, a speculum is employed to uncover them. The operator generally takes only one pile at a time, always selecting the uppermost one first, and injects into its interior from one to four drops The injection turns the pile white, probably congulates the blood in its vessels, and results in its shrinking away, without the inflammation being at any one time severe enough as a general thing to prevent the patient from attending to his business. The well known power of carbolic acid to act as a local anaesthetic antiphlogistic and antisuppurative favors the progress. When the irritation of the first injection has measurably subsided, another pile is attacked in the same way."

Of the two remaining methods, the ligature and actual cautery, the latter is most generally employed. If you have a Paqueline thermo-cautere, you should employ the sharp pointed platinum tip at a little below white heat. By gently pulling the swollen mass down and pushing this into it at one or several points according to its size, the circulation in it is stopped and in a few days it shrivels up. If you have not such an instrument any blacksmith could make you an iron cautery consisting of a handle, stem, and at the end of that a sphere of metal for storing the heat necessary for supplying the point projecting from it and which does the actual work.

When there are loose flaps of skin hanging around the anus you may snip them off with a pair of scissors, hemorrhage if any being controlled by the ligature or pressure.

I have not been called upon to do any of these operations here, for I have not yet came across a case that did not readily yield to medical treatment which as I have already said consists largely in preventing constipation.

GYNECOLOGICAL REPORT.

By E. H. Trenholme, M.D.
Professor Gynecology Bishop's College, Montreal.

Vaginismus is such a serious and at the same time such an intractable affection that we gladly accept any plan of treatment that adds to the means we already possess for its cure. A short paper by Dr. W. C. Peaslee, of Denver, Col., published in the St. Louis *Medical Review* is of such value that we give it in its entirety. He says that to treat this disease in a manner that will be tolerated by the patient, often taxes the inventive faculties of the physician to their utmost capacity, and in many cases patients will not submit a second time to the painful treatment which we ordinarily adopt. Recently cases have come to me for treatment who had been under the care of several other physicians, but the means adopted in each case produced such unbearable suffering, that after several attempts the patients absolutely refused to receive further treatment, which consisted mainly in the introduction and prolonged use of a speculum. This always induced severe and very painful contractions of the sphincter vaginæ muscles upon the speculum, producing a very telling effect upon those muscles which I think are of secondary importance in the treatment. Believing, as I do, that the pathological condition exists principally in the mucous membrane of the vulva and vaginal orifice, which, when irritated, is followed by contraction of the sphincter muscles (as occurs in closure of the eyelids from irritation of its lashes, or spasm of anal sphincter from ulcer or fissure) I directed my efforts entirely toward that membrane. To do away with the suffering incident to the contractions of the sphincters upon an unyielding speculum. I use a large sponge tent which I prepare by passing a piece of small rubber tubing eight or ten inches long, or a catheter (in which I insert a piece of wire to prevent compressing the tube when winding the tent) through a cone-shaped sponge, over which apply a layer of strong twine, compressing the sponge as closely as possible, then lay aside, and when dry insert the tent into a rubber condum (to prevent sponge from penetrating the mucous membrane), fastening the open end of condum firmly around the rubber tube. Lubricate and insert, except about one-half to three-fourths of an inch, which is left external to sphincter for the purpose of pressing against the vulvar portion of the mucous membrane; then attach a syringe (containing from one-half to on ounce of warm water) to the rubber tube and inject the contents, which will be carried to the internal end of tent, causing it to expand first, which aids materially in its retention. Remove syringe and tie the tube or insert a plug to retain the water; then apply patient's periodical bandage, and after she has remained in recumbent position about half an hour, permit her to get up and go about the house, allowing tent to remain as long as forty-eight hours, if borne well.

This method of treatment affords a very effectual means of overcoming the disease without confining our patients to their beds, and without much suffering, as the sponge readily yields to the contractions of the muscles, yet is sufficiently elastic to exert a firm pressure upon the mucous membrane of the vulva and vagina. I believe this sponge tent is fully as efficacious as the Barnes bag, and much more acceptable to the patient, since the sponge is more readily compressed. The results which I have obtained are so satisfactory that I am convinced this treatment if properly carried out we need scarcely ever resort to the division of nerves. A case or two may not be in appropriate here.

Dr. J. R. (initials borrowed) having previously consulted me concerning his wife, brought her before me January 5th, 1882. She had suffered much from occasional attacks of neuralgia. Is of gouty diathesis, twenty-five years of age, had been married three years, and had never had intercourse, she being so sensitive as not to tolerate the slightest touch of anything to the vulvar mucus membrane; had resisted all his arguments for operative treatment. On examination I found two large vascular excrescences protruding from the orifice of the urethra; also several carunculæ around margin of vagina, which I considered the prime factor in this case, but, finding I could not persuade the patient to submit to operative interference for their removal, I made an appointment with them, and on the following day inserted a sponge tent, which the patient retained for two hours with but little inconvenience. I inserted another the following day, which she retained eleven hours. After the use of seven tents the doctor reported a perfect cure.

February 27, 1883, Mrs. M. B., aged 24, slight build; been married two and a half years, and bearing every evidence of sexual starvation, her health having failed rapidly during her married

life. She stated she had not been able to have intercourse with her husband on account of being so tender and sensitive. An examination verified her statement, and disclosed the presence of a severe leucorrhœa, an abundant discharge of viscid mucous, which led me to suspect uterine trouble. I attempted to use the speculum, but she could not tolerate it. I ordered hot vaginal injections for that evening and next morning, at which time I inserted a small tent, which by its gradual distention was borne four and a half hours quite well. I prescribed nerve tonics, and by the use of five tents, gradually increased in size, she completely recovered.

Dr. W. H. Byford, in an excellent paper read before the American Medical Association, recently, draws attention to the great care required in the treatment of uterine diseases if we would avoid the dangerous consequences that not unfrequently follow examinations and operations. The following conclusions to his paper are worthy of careful study:

1. The sometimes terrible effects of examinations or operations in the pelvis do not often, if ever, take place when there is not a perceptible predisposing inflammation.

2. The inflammation may be so slight as to be easily overlooked.

3. It may be an original condition; the sequence of an acute attack long gone by, or it may be the product of some immediately previous examination or operation, the effects of which have not subsided.

4. To avoid the dangers of acute inflammation we should, in making a first examination for pelvic disease, conduct it in such a way as not to give the patient much pain, and, when she complains of much suffering, desist, at the sacrifice of completeness of diagnosis.

5. Complaints of much tenderness to the touch, or the use of instruments, especially in parous women, is sufficiently diagnostic of inflammation upon which to base treatment for that condition.

6. If, with such tenderness, a thorough examination or an operation is imperative, it should be done under profound anæsthesia. There is no question, in my mind, that much less danger of ill-effects is incurred in making examinations or operations on susceptible subjects, under the free use of anæsthetics.

7. Examinations or operations should not be repeated until the effects of the first have entirely passed off.

8. As chronic parametritis is a frequent complication of most of the morbid conditions of the uterus, it should be always suspected, and its diagnosis be carefully considered in all cases of metritis.

9. When chronic parametritis is present, it should be the chief, if not the exclusive, object of treatment until removed.

10. It is not safe to use the sound, sponge-treatment, or intra-uterine stem, when there is perimetric inflammation.

11. It is especially dangerous to replace a displaced uterus, when it is bound down by inflammatory adhesions, by any means which will overcome its fixedness by force.

12. The use of pessaries or supports of any kind, which find their lodgment in the pelvis, is generally followed by disastrous consequences when there is even slight primitive inflammation.

13. All local treatment of the uterus must be conducted with the greatest care in all cases where this complication is present.

Dr. H. C. Howard, of Champaign, Ill., in speaking of iodoform says he finds that in so-called endometritis or uterine catarrh, that a suppository composed of one half-drachm of finely powdered iodoform with one ounce of the butter of cocoa, acts very beneficially.—The ointment will keep in a shallow jar, and 2 to 5 grammes may be introduced by means of a thin silver tube, about one-fifth of an inch in diameter, with a closely fitting piston. This tube is 8 inches long. By contracting the piston to a depth according to the required suppository, it is then filled by forcing it into the ointment. The tube is then passed into the uterine cavity, where the suppository is deposited by simply pushing down the piston. This preparation melts quickly, and causes no pain, in these respects being preferable to the gelatine pencils often used.

Manganese for Amenorrhea has for some time been tried with much success by Drs. Ringer and Murrell. It may be used in solution (B. P.) or solid in 1 or 2 gr. pills. It is best to begin with 1 gr. three times a day, and gradually increase the dose to 2 grs. four times a day. The best time to give the remedy is three or four days before the menstrual period. If this fails to bring on the flow it may be continued steadily for 3 months. Its most noticeable success has been achieved in young persons from 18 to 25 whose usual regular flow has been arrested by cold or wet feet. Especially has it succeeded in those recently from the country. It usually takes about three days for the medicine to produce its effect, but in some cases the flow comes on after the 2nd or 3rd dose. The medicine can be continued during the flow, as it helps its escape. This remedy has succeeded when iron, aloes, nux vomica, pulsatilla, nitro-glycerine and mustard baths have failed. In scanty menstruation it has been found to increase and prolong the flow. In some cases in girls of 15 or 16, who had never menstruated, it generally brought on the flow. Its value has been proved also in cases of irregular menstruation in married women whose regularity has been interfered with by lactation. The manganese should not be given in cases of gestation ; it is useless to induce the flow in advanced phthisis.

The pill form of administration is the best borne by the stomach.

The modus operandi of the remedy is not known. It is not by improving the condition of the blood, as it acts equally well in both plethoric and anæmic cases.

Diseases of the Fallopian Tubes has engaged the attention of Dr. Savage, London, and his remarks upon the three forms of Fallopian disease viz.,hydrosalpynx, pyosalpynx and hæmatosalpynx, are worthy of attention. It is important to bear in mind the anatomy of the tubes which, like the uterus, is a portion of Müller's duct. The muscular tissue of the tubes being continuous with that of the uterus itself, they also have the same serous covering, and the mucous membrane of uterus and tubes are continuous. This latter fact accounts for the spread of disease from one part to the other, just as orchitis may arise from gonorrhea in the male. The reason why pus is not formed in the uterine cavity as frequently as in the tubes, is due to obliteration at each end, also to the small amount of areolar tissue in the uterus compared with that in the tubes. These tubular disorders are more frequent in the married than in the unmarried. The history generally shews that these patients have had some form of pelvic inflammation, or tedious convalescence after childbirth or miscarriage. Gonorrhea is also a frequent cause, and in its latent form will explain many obscure cases of peritonitis in newly-married women. Intra uterine pessaries may cause salpyngitis. Pyosalpynx may occur with acute rheumatism. Inflammation of the ovaries frequently occurs with that of the tubes, and is probably due to the same cause or causes. Menorrhagia is a frequent accompaniment of both hydro and pyosalpynx. The first effect of inflammation is to close both the uterine and the finitriated ends of the tube, hence the accumulation of fluid and the sausage-shaped distention. The character of the pus varies from that of a laudable character, to that of a most offensive character. If the tubes are not renewed they give way to repeated inflammatory attacks and cause death.

Cases of hydrosalpynx are not so serious as that of pyosalpynx. Dr. Savage thinks they are sometimes mistaken for a large Wollfian cyst. where a single tapping has been curative.

Treatment—Expectant and medicinal treatment are not to be relied upon. The presence of pus is much more serious than when clear fluid exists. The temperature of the patient and condition of pelvic structures point out the need of prompt action. To tap "*per vag*" is dangerous, as pus may escape into the peritoneum ; its removal often is very difficult. As spontaneous absorption of two sacs of pus as large as an orange is not to be looked for, one of *three* things must result if left to itself : 1st : Absorption of the fluid, which is not apt to occur in any case, and impossible when the fluid is pus. 2nd. Chronic invalidism, constant pain, frequent high temperature or rigors, etc., etc., and 3rd; bursting the sac, which if it took place into the rectum might result in cure ; but if into the peritoneal cavity, it would destroy life. The following cases are given in illustration, also Dr. Savage's concluding remarks in his own words.

Case 1. Patient had menorrhagia, with a small lump on right side of pelvis. Tents were inserted, and the uterine cavity explored : nitric acid being applied to the interior. Died of septicæmia, with abdominal distention, At the *post mortem*, a pyosalpynx on the right side was discovered,

showing distinctly its sac and a point at which it had burst, with the contents free in the peritoneal cavity.

Case 2. In one of my first operations of this kind I found that the anterior wall of the sac on the right side was composed, at one spot, of only a single layer of membrane, thin enough to be almost transparent, and which must have given way on the slightest pressure; such, for instance, as romping with a little child on the lap, etc., etc.

Case 3. In a patient recently operated on, the left distention gave vent to a quantity of stinking pus immediately on my touching it with my fingers, using scarcely any pressure at all. Here, a very little external pressure, even examination by double palpation, might have caused a rupture.

The diagnosis of an enlarged and distended tube must be frequently to some extent presumptive, founded upon the clinical history and physical signs. There will be found a tumour of not very considerable size in the position of the Fallopian tube on one or both sides of the uterus or, if larger, it may be felt almost wholly in Douglas's space. A small ovarian cyst, a phlegmon in the broad ligament, or a small hæmatocele, are the affections which would most generally be taken for it; but I have been able in a certain number of cases to say beforehand that the tumour felt was most likely a distended tube, in which the result proved that I was correct. In the acute forms, the parts about the uterus may be felt to be boggy, with more or less fixation of that organ. In the more chronic forms, the uterus may be quite free and mobile; and the tube felt, more or less tender, as a small tumour, floating about apparently quite freely. If the tumour is large, say the size of a small orange or more, and is to some extent fixed by adhesions, the result of previous inflammatory attacks, the uterus is less free, and may be pushed to one or other side. With the patient lying on her back, and especially if thin with a lax abdominal wall, important aid may be also gained by the use of double palpation, *i.e.*, with the finger of one hand in the vagina, and the other hand exercising pressure outside through the abdominal wall. The clinical history, in addition, will give a considerable amount of aid in the diagnosis. In some instances, I feel sure there is nothing to be felt in the pelvis before operation, and we have nothing to guide us but the more or less constant pain and recurring attacks of inflammation; each attack making the adhesions stronger and more extensive, and rendering the subsequent removal by operation more dangerous.

In performing abdominal section for the removal of these tumors the incision may generally be, say two inches, or just enough to insert the fore and middle fingers of the left hand. It would seem as if an enlarged experience enabled the operator to separate the adhesions with greater facility, and that an increased "tactus eruditus" taught him the more easily to distinguish the line between ovary or tube and the surrounding parts. The omentum is sometimes found to be troublesome, getting entangled among the fingers. If there is any doubt in the surgeons's mind as to the exact relation of the parts, I think it is best to take the fundus uteri as a landmark, and by tracing outwards, on either side, the ovary, tube, and broad ligament can generally be accurately mapped out. If the tumour, after being separated from its bed of adhesions, is large and cannot be brought out through the short opening, it is often a good plan to aspirate it, especially if the contents are serous, when the collapsed tube comes outside readily. If any of the serum or pus escapes into the pelvis, especially the latter, it is of the utmost importance to make a most complete *toilette du peritoine:* in fact the patient's safety depends more upon this than perhaps all other datails in the operation put together. I would say, sponge, sponge, sponge! I do not think it necessary to wash out the pelvis; dry sponging is quite as effective. There need be no fear of too much sponging. If there has been no escape of pus, and if I am sure also of no blood being present, I make it a rule to close the abdominal wound completely: otherwise, I insert a glass drainage tube.

I have of late omitted the use of the spray in performing abdominal operations. This doctrine of cleanliness has doubtless been brought about very largely indeed, if not wholly, by the work which Lister has done; and I understand it to include many items, such as abundant use of water, most careful attention to sponging, arrest of hæmorrhage, and drainage where necessary. If there is the slightest doubt, before closing the wound, as to the presence of fluid or the likelihood of much future oozing of bloody serum, you must sponge very thoroughly indeed, and will probably require a drainage tube.

The remarkable and well-known frequency with which both tubes will be found affected with

disease at the same time, renders it necessary to remove both; and I would go so far as to say that, when one has been removed, it is generally best to remove the other one also, even if it be found at the time of operation to be apparently healthy, as the probability is that it would sooner or later become affected in the same way as its fellow.

There are some cases which have been classified as pelvic cellulitis, or pelvic abscess, which I feel sure would, if their exact relations could be made out, come under the head of pyosalpynx, or pus so contained that it could be removed, and the operative treatment in such cases is gradually throwing a considerable amount of light on pelvic suppuration, so that many hitherto incurable cases may be cured. It does seem to me to be very important that we should recognize the serious position in which patients are placed who are having from time to time recurrent attacks of pelvic inflammation.

Society Proceedings.

MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

Stated Meeting, February 29, 1884.

WM. OSLER, M.D., 2ND VICE-PRESIDENT, IN THE CHAIR.

Unilateral Hyperidrosis and Tabes Dorsalis in a Female.—Dr. REED read the notes of this case.

Dr. HY. HOWARD said that unilateral hyperidrosis is by no means uncommon in cases of mania in the chronic stage, particularly where there is partial sensory and motor paralysis. It is just what we should look for in these cases, if we bear in mind the experiments of Dr. Isaac Ott, from which he drew the following conclusions:—1, That the sensory fibres decussate in part in the spinal cord; 2, That the vaso-motor fibres also do; 3, That the sudorific fibres follow the vaso-motor and decussate; 4, That vaso-motors run in the lateral columns. Now, seeing that in nearly all cases of mania, particularly in the chronic stage, there is found some abnormal state of the different nerves, producing low temperature, etc., it is but natural that we should find hyperidrosis in these cases; but in the case brought under our notice by Dr. Reed, as yet there has been no pathological psychosis. But with the hyperidrosis, there is absence of patellary reflex, showing some abnormal or degenerate state of sensory or motor tracts in the cords, with enlarged and fixed pupil, showing a partial paralyzed state of the ciliary nerves. With these symptoms, I should say that there was some abnormal state of the spinal cord, or of the vaso-motor, sudorific and sensory nerves in their course along the sides of the cord, which time will more fully develop.

Dr. OSLER had seen two cases of unilatera hyperidrosis during the past two years, one of which was in a patient suffering from caries of the cervica vertebræ.

Dr. Reed remarked that he, with Dr. R. P. Howard, was treating another case of tabes in a female.

PATHOLOGICAL SPECIMENS.

Actinomykosis.—Dr. OSLER exhibited the jaw of a cow attacked by the above disease, often called "big-jaw," or osteo sarcosis, and due to a fungus, slides of which were also shown. The yellow color in the centre of the nodular masses was well seen. Dr. OSLER said that this disease was fairly common in Europe and America, and has been known for a long time under a variety of names, such as tubercular stomatitis, scirrhus tongue, scrofula, etc. The tongue, lips and mucous membrane of the nose are often attacked. Actinomykosis is fatal unless removed with the knife. This disease is seen in horse and swine, and even in man, twenty cases being reported, all in Germany. In man multiple abscesses are generally produced throughout the whole body, a fatal issue always following.

Lack of Development in an Infant.—Dr. TRENHOLME exhibited the above, which was born at full time in the Western Hospital. There was entire absence of the genital organs and pelvic bones. The abdominal wall was formed by the posterior wall of the bladder, on each side of which the ureters opened. The anus was covered with integument. The child lived four or five days.

Local Paralysis Agitans.—Dr. MCCONNELL exhibited this patient and read the following history:—Fred. R., aged 34, was born in Cambridge, England. Since 20 years of age, has been occupied as a railway engineer. Has always enjoyed good health, and he is not aware of any member of his family having suffered from any nervous affection. On the 20th August, 1882, at Sacramento, Cali-

fornia, his engine collided with that of another train, and he was thrown violently to the ground, falling on the top of his head. He was quite unconscious for ten weeks. He received a scalp wound on the top of the head, at which point there can now be felt a distinct depression. On returning to consciousness he found his head done up in a kind of harness, which he soon after ascertained was intended to prevent an involuntary lateral and continuous motion of the head. He was treated in California and in various cities throughout the United States. He states that all kinds of treatment have been employed, such as blisters, actual cautery, electricity, trained exercise, &c., and endless medication, with no relief to the movements. *Present condition*—Is somewhat emaciated; very tall (6 feet 3 inches), and of light build, and appears very intelligent, speaking of his affection and the various methods of treatment in a humorous strain. There is a continuous rotation of his head from side to side—very regular when quiet, but increasing in frequency when he attempts to speak or perform any act, and ceases during sleep. When quiet the movements are 103 times per minute. Frequently complains of pain over region of left temple; has occasionally a slight discharge from left ear; for some time after the accident this was continuous. Is usually very restless during sleep, talking much and tossing about. Walks well, except when he has attacks of what, from his description, appears to be vertigo, accompanied with double vision; says sometimes single objects appear as if there were four. When one of these attacks occur, he usually has three or four in succession, occurring daily or every other day, thus a month or two might elapse before again experiencing any. They usually come on suddenly while walking, when he is unable to guide himself, and has frequently been locked up, his condition being mistaken for drunkenness. There are no symptoms of paralysis, as loss of sensation. From the symptoms of this case, have looked upon it as one of local paralysis agitans, possibly symptomatic.

Dr. Ross referred to the article in Ziemssen's Encyclopædia on cases of clonic spasm. The writer there says that cases similar to this one of Dr. McConnell's are generally produced by blows on the back of the neck or head; the operation recommended being to divide the spinal accessory nerve or excise a portion. The prognosis is bad.

Dr. TRENHOLME did not think it ought to be called paralysis agitans, and would suggest trephining over the depression.

Dr. FOLEY had seen nerve-stretching performed for a similar condition.

Dr. OSLER said the symptoms were not unlike those seen after removal of the vertical semicircular canals in pigeons.

In reply to Dr. Trenholme, DR. MCCONNELL said If not paralysis agitans, what is it? According to the classification of the narration of the disease by Sanders in Reynold's System of Medicine, I certainly think it must come under that title. In regard to the suggestion made of trephining the skull at the point where the depression exists with a view of curing the case, I think that result would hardly be attained. The movement is produced by alternate contractions of the sterno-cleido mastoid muscles, thus indicating some implication of the nervous structures at the origin of the spinal accessorius. I therefore think it a question whether treating the surface of the brain would have much effect on an apparently localized lesion in the upper end of the cord. In reply to Dr. Osler that it would be better classed as a case of multiple sclerosis, I may say that the fact of the affection occurring in one at his age, and being confined to the head, would favor that view; but, on the other hand, the definite movements occurring during rest, as well as during voluntary movements and the fact that no paralysis exists as yet, although the tremor has lasted now a year and a half, are points which are generally supposed never to obtain in multiple sclerosis.

Stated Meeting, March 14, 1884.

T. A. RODGER, M.D., PRESIDENT, IN THE CHAIR.

A groom sent by DR. GURD was exhibited to shew what appeared to be a clear case of accidental inoculation of horse-pock in the human subject. A dark-colored scab, depressed in the centre, was to be seen a little below the outer corner of the left eye and the parts about were red and swollen. One of the horses which he had the care of was suffering from horse pock, so prevalent in the city lately.

Dr. PROUDFOOT shewed a specimen of epithelioma of the lower eyelid removed by him a few days ago.

Dr. KENNEDY exhibited a small *Anencephalic Fœtus*, the deficiency also extending as a spina bifida downwards to the middle of the dorsal egion. There are also an abdominal hernia, the protrusion being covered with the peritoneum only. At birth there was evidence that general peritonitis had existed for some time, which no doubt had caused the death of the fœtus some days before delivery. The case was of some interest owing to the difficulty that arose during delivery. Dr. Kennedy gave the following history: The mother had passed through several pregnancies. Her first child was carried to full term, but the labor was difficult and only completed by instrumental delivery. Each successive labor terminated at the seventh month without any apparent cause, none of the children surviving, She came under my attendance with this last pregnancy, and at the time of engaging my attendance for her confinement, stated that a physician who had examined her had found an extensive laceration of the womb. No opportunity was given me of verifying this condition. Anticipating a recurrence of premature labor, rest and other precautions were aken to avoid its induction but without avail. I was sent for about the seventh month, and found she had been in labor about twelve hours. On examination of the abdomen the fœtal body was felt to be lying in an oblique position relative to the mother's body. A vaginal examination showed the os to be fully dilated and a large amniotic sac distending the vagina. As no movements had been felt for some time by the patient and there being occasional discharges of blood, the membranes were ruptured. An immense quantity of amniotic fluid came away, followed by a free discharge of blood. Failing to find any part of the child presenting, and as the loss of blood was becoming serious, the hand was passed into the vagina. The intention was to perform version at once, but, owing to the pain it was thought best to retain the hand in the vagina as a plug to prevent loss and send for assistance. While waiting the placenta and cord were forced down into the palm of the hand, showing that the attachment of the placenta had been very low, and that easy separation had taken place. Dr. Perrigo arriving, gave her chloroform. The hand was introduced into the uterus, which was found constricted in the middle. Dilatation of this constriction was slowly effected, and in the cavity above the fœtus was found and brought down by the feet. Delivery was speedily effected, the patient making a splendid recovery. This patient would, without doubt, have died from hemorrhage but for the promptness of assistance given her. The low attachment of the placenta may in some measure account for the deficient development of the fœtus.

Dr. TRENHOLME stated that in cases of lacerated cervix uteri the cause of abortion was not due so much to the laceration itself as to the diseased condition of organ induced by the lesion. The uterus was irritable and the altered state of the tissues hindered its normal development. The mere fact of lack of support was not enough to induce abortion, or we would meet with such more frequently than we do in multipara where, as is well known, a considerably dilated os was compatible with normal gestation. The reflected decidua effectually closed the womb, whether the os was lacerated or patulous as already stated.

Dr. HY. HOWARD considered that there must always be a physical cause for a physical effect, and said it was the duty of scientific medical men to get at the cause of such deformities. He related a case in his own family of port wine mark due to a maternal impression.

Dr. TRENHOLME avowed his belief in the transmission of maternal impressions to the fœtus.

Dr. PROUDFOOT reported the case of a child born with one arm and one leg.

Dr. WILKINS remarked that Paget reports a case of a child with deficient fingers, apparently due to the mother having handled a deformed hand during pregnancy.

Dr. GEO. ROSS thought that the only cases of irregularity were the remembered ones. He also reported a case of hydrocephalic fœtus with fusion of the fingers and toes.

Dr. TRENHOLME exhibited two *Dermoid Cysts* each attached to an ovary which he had removed on Saturday last. The left weighed two pounds and the right one pound. Both fallopian tubes were considerably dilated. The uterus, removed *post-mortem* and normal in appearance, was also shewn. The woman was aged 32, healthy, &c. Had suffered for many years, but especially since birth of last child, 5 years ago. Of late was unfit for the duties of life and sought relief. Temperature and pulse continued most favorable for the first 24 hours, when pulse rose to 150, notwithstanding drop doses of veratrum viride, which was continued 8 or 10 hours. Twenty minims of Battley were given hypodermically in the evening

to quiet the utterances of patient. She passed a quiet night and gradually sank, and died 44 hours after operation. Autopsy shewed limited but insignificant local peritonitis and some slight effusion. Heart was normal. The womb had healed by first intention throughout. The cause of death, while not clear, may be perhaps fairly laid to the veratrum viride, which may have caused the otherwise unaccountable collapse and death.

Dr. KENNEDY remarked that he had seen two patients who seemed to have been affected injuriously by veratrum viride, and objected to its use in a case like this of Dr. Trenholme's.

Dr. RODGER had observed great rapidity of pulse follow the use of veratrum viride.

Dr. STEWART said that cardiac depressants as veratrum viride are contra-indicated in puerperal cases.

Dr. Ross related cases of great depression produced by veratrum viride in the Montreal General Hospital. Convalleria seemed also to have acted unfavorably in a recent case treated there.

Dr. MACDONNELL exhibited photos of a patient the subject of an internal tumor. The cutaneous abdominal veins appeared excessively enlarged.

Slow Pulse.—Dr. MIGNAULT related a case of slow pulse in a dyspeptic—treatment brought the beats from 38-48 to 70.

Dr. WILKINS met with two cases where the rate per minute was only 45.

Dr. STEWART had a case of 25 to the minute, which, under atropine treatment, went up to 100.

Drs. MACDONNELL and ARMSTRONG also mentioned having seen cases of abnormally slow pulse.

Meeting held March 28, 1884.

The President Dr. RODGER in the chair. The following is an abstract of Dr. Jas. Bell's paper on "Some Cases of Fracture of the Femur, treated by plaster-of-paris splint."

Three cases were reported all occurring in children. The first, a little boy 1½ years of age, with simple fracture in the middle third. The second, a boy four years of age, with fracture just below the trochanter from direct violence,—being run over by a heavily-laden cart.

The third case was that of a strong, healthy boy, aged 8 years, with fracture at the junction of the upper and middle thirds. In all these cases the treatment was the same. Ether was given, the imb extended, and the fragments brought in to position, and held there until a plaster splint had been applied, extending from the toes and including the pelvis and loins. Co-aptative splints of pasteboard were moulded to the leg and applied between the layers of plaster bandage. In none of these cases has there been the slightest trouble of any kind, and in each case when the plaster was removed the union was found to be most satisfactory. In the first case there was no appreciable shortening. In the second about a quarter of an inch, and in the third a little over a quarter, but less than half, an inch. These cases were exhibited, as also an old man aged 62 years who had had a bad compound fracture of both tibia and fibula just above the ankle joint. The fracture of the tibia had been oblique and about three-quarters of an inch of the protruding fragment had to be removed with the saw before it could be reduced. The limb was then permanently fixed with plaster-of-paris, leaving the wound exposed through the small opening in the bandage. The wound was dressed with Listerian precautions and the patient was discharged at the end of eight weeks with a sound leg. He is now doing his regular work (six months after recovery), and has been for some time, without any inconvenience.

The writer, in summing up, thought that in a great many cases the plaster-of-paris splint was the best that could be applied to a fractured femur, notably in children, in nervous and fidgeting people and in fractures complicated with delirium tremens, also among the poorer class of patients, where a suitable bed and good nursing (which are so essential in the ordinary treatment of extension) could not be secured. He also thought that the objections urged against it for fracture of the femur were very much overrated.

Dr. GURD said that he would not like to risk treating an adult's fractured femur in this way, as he feared that before union had occurred there would be no pressure around the limb, owing to the rapid atrophy which follows disuse and bandaging, thus allowing displacement of the fractured ends.

Dr. BLACKADER said he had broken the femur of an infant with the blunt hook in a difficult breech case and, assisted by Dr. Sutherland, a gutta percha splint was applied, which answered admirably.

Dr. SUTHERLAND said he was going to use plaster-of-paris splints in these cases in the future.

Dr. SHEPHERD quoted Heath as saying that there was no necessity to take in the joints where plaster ofpari s was employed.

Dr. Rodger had lately used plaster-of-paris splint for fracture of the femur in child aged 5 years with excellent results. He always uses this method of treatment for fractures of tibia and fibula.

CASES IN PRACTICE.

Dr. BELL said that this evening he had been sent for by the Coroner to make a post-mortem examination on a young man, aged 28, who had been found dead in his bed. Death was found to have been caused by the bursting of a small aneurism into the pericardium.

The aneurism arose from the lower and back part of the tranverse portion of the arch. The young man had been treated as an out-door patient at the Hospital for pains in the back. Aneurism had not been detected.

Meeting held, April 11th, 1884.

The President, Dr. RODGER, in the chair.

Dr. TRENHOLME exhibited two pairs of ovaries and tubes lately removed. One case was operated on 22nd March. Both ovaries were much diseased and enlarged to about four times their normal size. The patient was 32 years old, and had always suffered much at her monthly periods. Her sufferings have gradually increased year after year up to about November last, when she began to manifest symptoms of insanity of a melancholy religious character, with a suicidal tendency. Her monthly sufferings abated with the advent of the mental infirmity. The patient had been under the care of Dr. M. in Ontario, who suspected some disease of the internal organs of generation and sent her down to me On examination both ovaries were found to be enlarged and tender, the uterus congested, and tender, but otherwise normal. The operation was made with the hope of benefiting her mental condition. The wound healed by first intention throughout, and the sutures removed on the 5th day, not a drop of pus being present. The patient made a rapid recovery, and returned to her home before the end of the third week. But little could be determined as to the result of operation upon her mind, but, so far as could be judged, she seemed somewhat benefited. The future of this patient will be watched with interest and reported to this society at another time.

Case 2.—Patient, aet. 22, has suffered much for several years from pelvic pains, aggravated at each menstrual period. Both ovaries tender and enlarged, uterus congested and very tender and also retroverted. Attempts at replacement and the use of a pessary had been followed by pelvic cellulitis; even with greatest care could not tolerate a pessary. Rest and local treatment relieved for a time, but when she attempted to work was again laid up.

3.—As the girl had no friends or means of support, and her health precluded service, I removed the specimens now before the Society. Both ovaries (as you see) are much enlarged, undergoing cystic changes. The tubes also very much congested. This patient has so far made a most unsatisfactory progress towards recovery. There seem to be no healing power in her, and, while no dangerous symptoms threaten life, a tedious convalescence is looked for.

Dr. HY. HOWARD considered the first to be a case of acute dementia, and said that peripheral irritation, especially from the organs of generation, will some times be followed by dementia in both sexes, often taking the form of religious dementia. Dr. H. mentioned two or three cases where young men on the first night of their marriage became insane.

PURPURA HÆMORRHAGICA.

Dr. KENNEDY mentioned that lately he had had under his care four cases of this disease, all in young children of different families. He asked if other members had seen an unusual number of those cases.

Dr. REID said he had been treating one case at the Dispensary.

NITRO-GLYCERINE IN EPILEPSY.

Dr. F. W. CAMPBELL spoke of the continual good results he is having with nitro-glycerine in the treatment of epilepsy. None of the patients whom he has so treated have been entirely cured, but with all, the attacks are milder and much less frequent. The usual dose which Dr. C. gives is one drop of a one per cent. solution three times a day.

Dr. TRENHOLME asked for the modus operandi of this treatment. Dr. Campbell said he was not as yet prepared to say.

Dr. HY. HOWARD congratulated Dr. Campbell on his success in this treatment of epilepsy and said that the Germans classified the forms of epilepsy as follows :

1st Those due to contraction of the cerebral vessels from irritation to the vaso-motor nerves Here bromide of potassium is very useful.

2nd. An abnormal condition of dura mater. Bromide useless.

3rd. Due to irritation of the anterior pillars of the spinal marrow. Ether spray best for this.

4th. Lesions of different parts of the brain or cord Of course the difficulty is to be sure of the cause.

Progress of Science.

PHLYCTENULAR DISEASE OF THE EYES.*

By Oliver F. Wadsworth, MD.., Boston.

The affection to which I desire to call your attention to-day is characterized by the eruption of vesicles or pustules on the conjunctiva or cornea, and often attended by much apparent photophobia. It is one with which you are doubtless all more or less familiar under some of the many names given to it. Phlyctenular, pustular, scrofulous, lymphatic ophthalmia, conjunctivitis or keratitis; herpes or eczema of conjunctiva or cornea; fascicular keratitis; ulcer of the cornea,—such are some of the designations it has received,

The extended statistics collected by Cohn show that affections of the conjunctiva and cornea make up half the sum of eye disease. Horner found the same to be true as regards children alone, with this difference, that whereas when all ages are considered, the conjunctival affections outnumber much those of the cornea, with children the proportion is reversed; in them the cornea being implicated in 27.2 per cent., the conjunctiva in 21.7 per cent. of all cases. Moreover, according to Horner, phlyctenular conjunctivitis and keratitis comprise more than half of the disease of these membranes in the child. Arlt also says this is without question the most frequent of inflammations of the eye.

The very frequency of its occurrence makes its discussion appropriate before an assemblage of general practitioners. But its frequency is by no means the greatest of its claim to our interest. Its habitual obstinacy; its tendency to relapse or recur on the least provocation; the variations in form which it manifests; the fact that its appearance is of itself evidence, almost invariably, if not wholly without exception, of some deterioration or imperfection of the general health; and, finally, the frequent permanent impairment and occasional destruction of sight that it causes, are sufficient reasons for its careful consideration and study. According to Birch-Hirschfeld, six per cent. of the inmates of the blind asylums of Saxony lost their sight from this disease. Such a percentage is undoubtedly higher than would be found in this country. The number made blind by it bears, however, but a small proportion to the number of those whose sight, in one or both eyes, is more or less seriously and irretrievably injured.

While the vast majority of those afflicted are young children, adults are not wholly exempt, though with them the disease is comparatively rare. In my experience, also, the course is usually mild in adults, even if sometimes prolonged.* It is in children chiefly that severe forms are seen and disastrous effects produced.

Unfortunately, by the laity the malady is very generally looked upon as a troublesome but innocent accompaniment of teething, safe to take care of itself, and to pass away so soon as the irritation attendant on dentition has subsided, or as a sequela of measles or other exanthem, not specially requiring treatment. In consequence of this opinion the child is only too often made the subject of experiment with "household remedies," or allowed, even aided, to aggravate the disorder by following its own inclinations.

For the physician the understanding of the affection is made somewhat more difficult than need be by the prevailing habit in text-books of treating of eye diseases according to their anatomical situation. There is justification for this method of division, but as a result of it diseases of the conjunctiva and of the cornea are separated more or less widely, and where, as in the present instance, the disease is essentially the same whether its habitat be conjunctiva or cornea, the identity does not always appear with sufficient clearness. Other reasons for confusion are to be found in the multiplicity of titles, some of them implying a relationship with other diseases which does not exist, and in the fact that by some authors certain variations of the diseases have been described under different names and as if distinct affections, by others different affections have been grouped under the same name.

The term herpes applied here is a misnomer. There is no evidence that the eruption has any sueh special connection with the sensitive nerves as is the case with herpes generally; the lesion of the cornea which may accompany herpes zoster is quite other in character than the phlyctenulæ, and the same is usually at least true when corneal or conjunctival affection is coincident with the ordinary herpes febrilis

Eczema, on the other hand, is a frequent accompaniment of phlyctenulæ as it is also a common affliction of young children. But a considerable proportion of the eczema observed in this connection is a secondary condition, due to irritation of the skin by overflow of tears and rubbing, or, on the lip and alæ nasi, by the catarrhal flow from the nostrils often present at the same time. The ocular changes do, indeed, resemble in some degree those found in eczema, yet there seem hardly grounds enough for adopting the title of eczema of the conjunctiva and cornea which Horner has proposed.

The main characteristic of the disease is the eruption of vesicles or pustules; these may be

*Read at the Annual Meeting of the Massachusetts Medical Society, June 1, 1883, and recommended for publication by the Society.

single or multiple, may vary in size from that of the head of a small pin to a diameter of several millimetres; the process may be exhausted with the eruption of one phlyctenula, or successive crops appear at irregular intervals; they may be situated on the conjunctiva, or cornea, or both, either successively or simultaneously, or may extend from one to the other. The duration of the individual efflorescence depends in the main upon its size and its situation; on the cornea the course is slower than on the vascular conjunctiva. The amount of irritation is far from being in definite relation to the severity or danger of the disease.

On the conjunctiva the eruption develops almost invariably in the near neighborhood of the cornea, and shows itself in two forms, the typical cases of which are sufficently distinct in appearance. The more common is that of an isolated efflorescence. Beginning as a localized, elevated congestion, the centre soon becomes grayish-white or with a tinge of yellow, due to an agglomeration of lymphoid cells. The epithelial surface is thrown off, the mass of cells beneath escapes, and there is left a depression with raised edges which gradually flattens and is again covered by epithelium, while the congestion fades. Around the pustule both conjunctival and sub-conjunctival vessels partake in the congestion; toward the fornix, where the conjunctiva passes from globe to lid, the conjunctival congestion extends, diminishing in amount, but often increasing in breadth as it recedes from the focus of inflammation, so that the whole congested region assumes a fan shape.

Comparatively seldom, however, does the patient present himself with this typical form of congestion. Oftener, other pustules appear in various positions simultaneously or before the first has healed, and the congested area thus becomes a wide one with reddening of the lid conjunctiva also. If the individual pustule is small and superficial it may run through its whole course in a very few days. From this there is every graduation to the sluggish, somewhat deep ulceration, three or four millimetres in diameter, its base ragged, grayish, infiltrated, which may be a fortnight in healing over.

The other, less frequent, type consists in the almost simultaneous development of small, often very minute, phlyctenulæ, studded along a part or the whole of the limbus conjunctivæ, close to the corneal border. The attending congestion is more general, though greatest in intensity here also at the site of the eruption. The duration of the individual phlyctenulæ is short, but successive crops follow each other more or less rapidly, and extend the time indefinitely. Both forms begin with a sensation of burning or smarting as of a foreign body, more marked in the latter variety.

So long as the affection is confined to the conjunctiva alone the subjective symptoms are comparatively light, and the prognosis is positively favorable, even if the course be somewhat prolonged. Yet, until convalescence is fully established, the danger that the cornea too may be implicated is always threatening, and when that occurs the situation becomes more serious.

The manner in which the cornea becomes involved varies. A pustule may fall astride of the corneal edge, half in conjunctiva and half in cornea. Should the pustule be small it will generally heal readily and do no damage, but a large pustule in this position may give rise to a deep, funnel-shaped ulcer and to infiltration of the cornea beyond it. It is not so very uncommon for such an ulcer to extend in depth and cause perforation. The so-called fascicular keratitis commences as a pustule in this position. Here, instead of following the normal course, the infiltrated raised edge of the ulcer is pushed farther and farther into the cornea, the tissue breaking down and leaving a groove in the corneal substance behind it. At the same time a bundle of new-formed vessels extends from the conjunctiva, keeping pace in its growth with the progress of the infiltration, filling, or more than filling, the groove, while only a scarcely perceptible depression separates its corneal extremity from the gray, crescentic wall which precedes it. Usually the infiltration moves at first toward the centre of the cornea, but it generally swerves a little from a straight line. It may stop at any part of its course, or cross nearly to the conjunctiva on the opposite side. It never perforates, but the vessels disappear when the process is at an end, leaving a grayish cicatrix, which is exceedingly persistent and characteristic.

Different, again, is the behavior where there are numerous small phlyctenulæ along the edge of the cornea in the limbus. Then, if the condition persist some time, vesicle following vesicle, the irritation excites the growth of vessels from the edge into the cornea cloe beneath the epithelium. The progress of the vessels depends on the degree of the inflammation at the site of the efflorescence, and they extend farther where this is greatest; but the regularity with which a fringe of straight vessels is formed along the whole circumference of the cornea is sometimes very striking. With the subsidence of the inflammation in the limbus the corneal vascularity vanishes without leaving a trace. More than a superficial ulceration of the cornea, hardly extending deeper than the epithelial layer, I have never seen with this form, but an infiltration, leading to annular ulceration of serious amount, is described as a very rare complication.

If the cornea is affected independently the pustules show the same variation in their behavior as on the conjunctiva. There is the same difference in size and number, the same irregularity in the time of their successive appearance and in their duration. They may present themselves at any part without distinction. There seems to be no place of least resistance. Congestion about the pustule is, of course, wanting,

but there is circumcorneal congestion, chiefly on the side nearest the inflammatory focus, and fading toward the fornix. A small pustule may be absorbed without coming to ulceration, but this is uncommon. From the superficial, grayish subepithelial swelling, which, losing its covering, readily heals without leaving any sign, there is every degree to the extensive, deep, yellowish infiltration, causing deep destruction of the corneal tissue, even perforation, healing slowly, generally with the assistance of vessels growing out from the conjunctiva to its edge, and only by the formation of permanent cicatricial tissue. Through this tendency to the formation of vessels on the cornea there is sometimes, when the eruption has been repeated and long continued, a sort of pannus developed. Such a pannus mostly may be distinguished by the greater irregularity of its form and distribution from trachomatous pannus, which latter almost always starts from above, while its lower edge is approximately horizontal. Seldom indeed, a sluggish, deep infiltration is complicated by hypopion and a low form of iritis. When it is borne in mind that, besides all the variations that have been indicated, a catarrhal conjunctivitis, with even considerable swelling of the membrane and mucous secretion, may be superadded, the possible diversity in the appearances presented is manifest.

The degree of injury to the eye as an organ of vision depends chiefly upon the situation of the lesion; a considerable opacity near the circumference of the cornea may be of little moment in this respect, yet, without directly interfering with the entrance of light to the pupil, it may still do harm by changing the proper curve of the cornea. The growth of vessels toward the ulceration is always a welcome manifestation, since the reparative process is hastened by their means, and it may be said in general that the perfection of recovery, the eventual freedom from opacity and changes of curvature, is the greater the nearer the ulcer is to the circumference and the shorter the time till healing is accomplished.

Of the subjective symptoms the most prominent and most troublesome is usually photophobia, so called. With an isolated eruption on the conjunctiva or a single pustule on the cornea this symptom may be but little pronounced. As a rule, however, it is present, and especially if the efflorescences are numerous and repeated does it often reach such a degree as of itself to become almost a distinguishing characteristic of the disease. A child thus affected may never open its eyes even in a moderate light for days or weeks; it buries its head in its hands, in the pillow, or in the clothes of its attendant, resisting violently any attempt to turn its face toward the light. It seems sometimes as if there were an effort to drag all the features, forehead, cheeks, lips, to one common centre and heap them up over the eyes. To some extent in accord with the amount of the photophobia is the quantity of watery secretion poured out, which, by keeping the lids continually moistened, causes excoriations and increases the irritation. Yet it would be a mistake to suppose that the severity of the ocular affection is to be accurately gauged by the photophobia. Rarely, indeed, where this is pronounced, is the conjunctiva alone involved; there may, however, be but few pustules on the cornea and those small and near the periphery. Precisely the worst cases, those with large, sluggish infiltration, extending deeply and causing large loss of substance (dense permanent cicatrices), or perforation with its consequences, have this symptom usually but little marked.

The title scrofulous ophthalmia, though it affirms too much, yet indicates rightly the general direction in which the cause of the disease is to be sought. Not that all individuals afflicted are scrofulous, even when the most extended application is allowed to the term; many are so, and it is in such that the most serious and persistent cases are to be found, notably the sluggish form, as well as those with great blepharospasm. But a condition of health below the normal, which carries with it an impaired power of resistance to harmful influences, is always present. Exposure to rapid changes of temperature while imperfectly protected by clothing, followed by the onset or exacerbation of catarrhal inflammation of the mucous membrane of the nasal passages and fauces, too often coincides with the beginning or increase of the ocular symptoms to be denied an influence as a causative factor. The exanthemata—measles, scarlet fever—may be regarded as acting to depress the tone of the general system, while the congestion of the mucous membranes they cause, in which the conjunctiva shares, may well prepare the ground in some measure for the local affection.

To form a definite diagnosis we murt obtain a view of the eye. In many cases this presents no special difficulty, in others the ingenuity and patience of the physician are taxed to the utmost if he wishes to avoid the use of forcible measures and often in vain. If the child can be coaxed to open its eyes, this is, of course, preferable; occasionally the application of cold to the lids will relieve, temporarily at least, somewhat obstinate spasm. Yet whatever means are employ ed they will fail in many instances, and then the only resource is the elevator of Desmarres, the child being placed on its back, and its head fixed between the knees of the operator. The use of the fingers to raise the lids in such case can never be as effective, and must produce painful and sometimes dangerous pressure on the eye.

Inspection of the eye is also necessary for the formation of our prognosis. Hesitation or mistake as to this may forfeit the confidence of the parents, a confidence often tried at the best by the persistency of the disease, and without which careful attention to the details

of the treatment is scarcely to be expected. It is not to be forgotten, however, that only a provisional prognosis can be given from the condition at the moment, and the state of the general health is always to be taken into account. Although the central portion of the cornea may have escaped hitherto, no one can safely predict that it will not be affected later. Moreover, we do well to warn the parents before dismissing the case from treatment that, for several years, with any depreciation of the general health, the disease may reappear.

The treatment may be divided into general and local. What has been said of the ætiology indicates both the importance and direction of the general treatment. It should never be neglected even in the lightest cases. The diet should be easily digestible and nourishing and attention to it in detail in always advisable; healthy action of the skin is to be promoted by frequent bathing; iron, malt, and cod-liver oil to be prescribed according to the case. The advantage of fresh air and light can hardly be overestimated. Even in the coldest weather it is usually better that the patient, properly clothed, should be taken out for a time daily, and this is the more needed the poorer are the hygienic surroundings at home.

Blepharospasm, so-called photophobia, is to be feared, not for itself, but for the prejudicial consequences it entails. The violet action of the orbicularis irritates still farther the already inflamed cornea, incites to friction and consequent excoriation of the skin of the lids with the result to increase the general nervous excitability, and prevents the free bodily movement so necessary, in children especially, for the preservation of health. In considering the means for its relief, we should constantly remember that the stimulus that excites it starts from the irritated terminations of the trigeminus, not from any hyperæsthesia of the retina. The indication then is to relieve the abnormal sensibility of these terminations. It is the irritation of the corneal nerves that chiefly excites the blepharospasm, and so far as they are concerned the local narcotic effect of atropine makes this our most reliable agent. The alleviating effect of even the first application is sometimes very great. A two-grain solution may be employed every other day, or two or three times daily, and if the case is seen early the spasm may thus be kept within bounds. But should the photophobic habit, if I may be allowed the expression, be once firmly established, relief is more difficult. When the lids are persistently kept closed it is commonly useless, or worse than useless, to intrust the application of this or any collyrium to the parents or attendants. In the efforts to force open the lids of a struggling child with the fingers, more harm islikely to be done than the atropine will counteract, and the increased flow of tears excited by the struggle will rapidly remove the small amount that has been instilled. The elevator is hardly safe in untrained hands. The application may, perhaps, be made when the child sleeps, but otherwise in such cases it is better left to the physician. Sometimes, however, reliance must be chiefly placed on less direct treatment. The benefit of cold applied to the lids has already been referred to. All friction of the lids must be prevented. Excoriations of the skin about the eyes may be washed with a solution of silver nitrate, or an ointment, containing ten grains of zinc oxide, or three or four grains each of zinc oxide and white precipitate to the drachm, be applied. The same treatment may be employed for eczema of the upper lip and alæ nasi, or elsewhere about the face, if present. Irritants are harmful. Darkness only aggravates the symptom. Within doors the light should be moderate and even, and be increased as the condition improves, but sudden changes of light, producing, as they do even in a state of health, contraction of the orbicularis, are to be carefully avoided. In the open air a dark shade, large enough to protect both eyes, though only one be affected, and arranged to stand out free from them, with a veil or smoke-glasses if required, are of use. It is by attention to details that success is to be attained.

When the eruption is limited to the conjunctiva a simple collyrium of borax in water or camphor water is often all the local treatment needed. Calomel, dusted lightly upon the conjunctiva from a camel's hair pencil, every day or two, till congestion has disappeared, seems to have a good effect in preventing relapses. But it must be employed with precaution. It should be pure and dry, only a very thin film of it should be formed on the conjunctiva, and the lower fold should be inspected after a moment or two, that if any have collected there in a clump or thread it may be removed. The action of calomel was for a long time unknown; now it has been demonstrated that it is soluble, to a slight extent, in salt water, and it probably acts as a weak solution of bichloride. In the presence of iodine there is produced a biniodide of mercury, and it should, therefore, never be used when the patient is taking any preparation of iodine, else a troublesome eschar may be the result. Properly used it is painless, and I have myself never seen any ill effect from it.

In general, astringents are to be avoided, but when the condition is complicated with a catarrhal inflammation of the conjunctiva, mild collyria of alum, zinc, or silver nitrate are in place. Yet these should be employed cautiously and their action watched if any fresh eruption exists.

With an eruption on the cornea I rely, with most oculists, on the action of atropine. Its soothing influence has already been alluded to. The frequency of its application is to be governed in the main by its effect on the pupil, and it is to be continued till the ulceration is again covered by epithelium. Here, also, calomel is apparently of benefit, but is in contradistinction to the

conjunctival affection, only to be applied after epithelial regeneration is well under way. Yet I would make one exception to this last statement. In the fascicular form of keratitis it has seemed to me that calomel, applied somewhat freely during the progress of the band across the cornea, has sometimes checked its course. So erratic, however, is this variety, and the opportunity for studying it so comparatively infrequent, that I am willing to admit it may have been coincidence rather than effect that I observed. With the ointment of yellow oxide of mercury, much used in the same conditions as is calomel, my experience has been limited, and it has appeared to me at least less agreeable to the patient.

The sluggish, deep infiltration, whether at the edge of the cornea or more central, showing little or no tendency to the formation of vessels, demands, besides atropine, the application of hot fomentations, continued half an hour or an hour three or four times daily. These help to relieve the pain, sometimes considerable, and invite the vascular outgrowth from the conjunctiva needed to furnish material for repair. Should perforation occur, pain usually ceases as by magic, and the reparative process begins. The subsequent care after perforation does not differ from that required in similar circumstances arising from other cause.

Many and various have been the remedies recommended to promote the absorbtion of corneal opacities left by this or other diseases. My own belief is that none of them are of special value, and that the opacities are best intrusted to nature to reduce, as she certainly will in part. Our task, after the immediate attack has passed, is to see to it that measures to improve and preserve the general health are continuously carried out and thus recurrence prevented.

RINGWORM: ITS PATHOLOGY AND TREATMENT.

By R. M. Simon, B.A., M.B., Cantab.

The disease is undoubtedly contagious, but its contagion varies in strength at different epochs of life, and the ringworm of childhood is not the ringworm of maturity. The disease is essentially the same, but very different in its situation; in childhood the head, in mature life the body or rarely the hairy parts of the face are liable to be affected, and the cause in every care is the tricophyton consurares.

The best way to find the figures is to extract one of the broken short and thick hairs, and after maceration for an hour or two place it under the microscope.

On the body, where ringworm especially affects the face, neck, or chest, it commences with small red circular spots, and is often associated with the formation of minute vehisicles. These circular spots, gradually increase at their circumferences, while the centre becomes more or less normal, the subsidence of the original vesicles being followed by desquamation. The advancing edge is raised, and red, and is an important element in diagnosis, for the patch might, but for this elevation, be taken to be one of eczama. Should there be any difficulty about the diagnosis, the point may be settled by scraping some of the epithelium from the inner border of the advancing ring, and the finding of the characteristic mycelium. I may at once discuss the treatment of this condition, as it is quite distinct from that of the hair' and by far more easy; any parasticide will be effectual, but I have been in the habit of using a preparation of equal parts of sulphurous acid and glycerine with good effects; a free use of soft soap and water is important, and it will be advisable in every case to examine the hair to see if there be a coincident patch there also. If fortunate enough to catch a case as its commencement, we find a small ring of minute vesicles, on a red base; the fluid which is between the rete mucosum and the epidermics is quickly absorbed and there results, a brauney desquamation which spreads rapidly and we soon have round patches of a greyish colour, covered with scales, and but sparingly with stumps of hairs. There is a great amount of grey debris surrounding the base of the hairs, which are thick and stubby, with a fracture like the end of a broom, and full of fungus; they come out very easily, more often breaking in epilation, but without pain, and this is important. If you find a child objecting very decidedly to epilation you may be moderately sure that there is no ringworm in the hairs you are handling.

For practical purposes ringworm of the head may be divided (1) into recent cases; (2) cases of disseminated disease, where the head is practically covered; (3) cases in which there remain one or two old patches which are most intractable. The cardinal feature which underlies all indication for treatment, is the tendency of the fungus to penetrate deeply into the hair follicles. Bearing this in mind, it will easily be seen how useless is the application of medicamenta merely to the surface. Over much washing must be avoided, for if the scalp be soddened by water, ointments cannot sink deeply into the folicles.

For recent patches I use glacial acetic acid, painting it on to the affected parts, but I do not think it better than blistering fluid. I never shave the head in these cases, preferring to clip the hair all over where the disease is widely distributed, and for half an inch round the patches, where there are but few. One cannot so easily distinguish the diseased hair from the sound, where they first emerge above the surface, and I have repeatedly seen cases whete a child has been most unnecessarily tortured by the extraction of healthy hair, which would have been avoided had the

hair been only closely clipped. Sometimes this treatment repeated once or twice will effectually cure the disease, but as a rule more treatment is necessary. It will be necessary, with the aid of a good lens, to every day extract a few of the diseased hairs, and to rub an ointment on the patches themselves, whilst it will be wise to employ for the rest of the hair a combination of carbolic acid with glycerine or oil. Mix carbolic acid with either of these in the proportion of 1 to 12, and let it be applied every morning. For the patches themselves you may use carbolic acid and glycerine in equal parts if the patient be about ten years old, and the skin not tender; but for infants and younger children it will be necessary to use a larger quantity of glycerine. Glycerine penetrates well into the folicles, and after its use you will find the hairs getting loose and very easy to extract. This preparation must be used with a sponge and thoroughly rubbed in night and morning, care being taken that it does not run down the face, which it very easily irritates. The best remedy consists of ung. sulphuris as a base, and varying proportions of ung. hydrarg, nitratis, citrine ointment, and carbolic acid. For a child of ten you may use equal parts of all three; for a child of two, 1 part of carbolic acid and ung. hyd. nit. to 5 of ung. sulphuris, and increase the proportion of the two more active agents in a direct ratio with the age of the child.

For the treatment of chronic cases of ringworm we have two modes and must be guided mainly by the extent of surface affected; where this is large we have a valuable remedy in the oleate of mercury. This should be mixed with acetic ether, in the proportion of 1 part of the latter to 7 of the oleate; the oleate being of the strength of 5 or 10 per cent according to the age of the child. In such a case you may commence by cutting the hair to about a quarter of an inch from the head, and washing well with the spiritus saponis alkalini of Hebra. This is prepared by mixing 2 parts of soft soap with 1 of rectified spirits of wine; allow the mixture to stand 24 hours, then filter and use the filtrate as a lotion. Dip a sponge first into hot water and then into this lotion, and rub on the head until a free lather results. Leave the lather on for a quater of an hour, and wash off again with water Rub the oleate thoroughly well into the patches night after night, and whenever the epithelium reaccumulates have recourse to the spir, sapon, alkalin.

In a majority of cases this treatment will be successful, but occasionally, while the greater part of the surface recovers itself, there will be left one or two isolated patches which resist all treatment. For these there is no help for it but the production of artificial kerion by the use of croton oil, which must aways be applied by a medical man and closely watched. Alder Smith directs that it should be painted on a small patch every day until the part becomes swollen, tender, puffy, and boggy: during the intervals of the use of the oil, poultices should be kept constantly applied. After a varying number of days of this treatment, the patch will be found covered with a thick yellow crust which is easily removed and leaves a red tender surface, and causes a purulent discharge from the follicles, which either carries with it the diseased hairs, or leaves them loose in the follicles and renders their extraction a matter of ease. Take care not to cause a slough of the skin, as thereby the hair follicles are destroyed, and a patch of permanent baldness remains; also do not attack too large a portion of the surface at the same time. Never declare a case well so long as there are visible minute black dots which are the orifice of diseased follicles: these must be treated by inserting a needle with a drop of croton oil far down into the follicle, as in the production of kerion this will be followed by local swelling and pustulation and the extrusion of the diseased hair. There generally remains after an attack of ringworm a large amount of scurf on the head, and this may be effectually treated by the spir sap. alkal.—*Birm. M. Rev.*, Aug.

THE MANAGEMENT OF ABORTION.

Dr. Walter Coles, in a paper published in the St. Louis *Courier of Medicine* for August, objects strenuously to the practice of removing the secundines in all cases of abortion after the expulsion of the fetus. That such procedure is not always necessary, and that it may do serious mischief, we think all experienced obstetricians will admit. We make the following extracts:—

"Let us suppose that we have been called to a case in which the embryo has just escaped during the third month and the secundines are retained. Under such circumstance there is generally considerable hemorrhage going on, and the first thing in order is to check it. Of course the most effectual and desirable method of so doing is to empty the uterus and cause it to contract. A teaspoonful of fluid extract of ergot is administered, and the accoucheur at once examines the uterus. If it be practicable by digital manipulation, or the aid of forceps, to deliver the placenta, this is a fortunate circumstance which should be availed of on the spot. But if the os is too contracted to admit the finger, or even if patulous and the membranous placenta is so adherent as only to be detached in fragments, it is better not to disturb it for the time being rather than resort to immediate and forcible extraction. We should, however, be equally far from pursuing a *passive* policy; the hemorrhage should be controlled by means of a tampon, aided by ergot supplemented by a full dose of tinct. of opium—the latter being especially beneficial as a soothing stimulant after blood loss. A tampon ought always to be applied with the aid of a speculum, that of Sims being the best. There is a great deal in the method of tamponing; it should be carefully packed over the os and around the cervix. The best material is old cotton muslin torn into strips; I prefer to put

it in dry. Sponge is of very little service as a tampon; it absorbs the blood and permits it to flow through.

"In most cases thus managed the physician will find on removal of the tampon twelve hours later that the secundines have either escaped entire, or else are presenting at the os, whence they may be readily removed by very slight manipulation. But in case this cannot be done without violence, it would be proper to wash out the vagina and again tampon, with the expectation that under the excitation of the plug and the continued influence of ergot the uterus will, by its contractions, detach and expel its contents. If at the end of twenty-four or thirty-six hours there is no indication of dilatation, it will be quite time enough to consider the propriety of artificial dilatation and extraction. If the internal os continues closed it is pretty conclusive evidence that the placenta is still adherent, and hence not extensively decomposed. Lusk recognizes this condition of the internal os as a valuable indication—a fact pointed out by Huter. He remarks that 'when decomposition has once set in, the os internum will, as a rule, allow the finger to pass into the uterus.' Such being the case, we have less reason for being in a hurry when the uterus is closed than if the inner os were lax and the discharges offensive; under the latter condition of things the practitioner should lose no time in emptying the uterus of all decomposing material, provided he can do so without inflicting too much violence on the organ itself." * * * *

"We are assured by the advocates of immediate removal that this feat is very easy of accomplishment —a thing which the merest tyro may perform —but most of our leading obstetrical authorities entertain a different view of the difficulties and dangers involved. Playfair, while admitting the desirability of emptying the uterus when feasible, goes on to say: 'Cases, however, are frequently met with in which any forcible attempt at removal would be likely to prove very hurtful, and in which it is better practice to control hemorrhage by the plug or sponge tent and wait until the placenta is detached, which it will generally be in a day or two at most. Barnes reiterates the same advice, and cautions us that we must not persevere too pertinaciously in the attempt at removal, lest we inflict injury upon the uterus. The same author, recognizing the fact that the placenta after abortion quickly undergoes retrograde changes, whereby its adherence to the uterine wall is weakened, thereby facilitating its removal, remarks that 'The consulting practitioner here occasionally reaps credit which is scarcely his due. He is called in perhaps on the third day, or later, when the adhesion of the decidua to the uterus is breaking down. He passes in his fingers and extracts at once. But had he tried the day before he might have failed like the medical attendant in charge."

In the following paragraph Dr. Coles expresses his decided preference of the tupelo tent over other dilators of the os:—

"Whenever there is serious and persistent hemorrhage threatening to exhaust the patient, active interference is of course demanded. Or, if there is an offensive discharge and an elevated temperature together with rigors, we have good reason to apprehend blood poisoning from the absorption of putrefying elements within the uterus. Under such circumstances it would be proper to explore the interior of this organ, dilatation being resorted to if necessary. For this purpose the tupelo tent it certainly far superior to the sponge or sea-tangle. It has all the dilating qualities of sponge, while is is cleaner, and can be introduced more readily, even without a speculum if desired. It has also the advantage over the seatangle in that it can be procured in larger sizes and is less liable to slip out of position. Whenever full dilatation is required the tupelo is preferable to all other tents. The uterine cavity having been exposed, all fragments of secundines should be carefully dislodged, with either the finger or curette, after the manner so well described by Lusk and Mundé, and the organ washed out with some disinfectant fluid. Where there is a tendency to bleeding, tincture of iodine answers an excellent purpose, and is cleaner than perchloride or persulphate of iron as recommended by Barnes. Where the disintegrating fragments are small, repeated irrigation of the uterine cavity (the os being patulous) will generally suffice, as they usually melt down and come away with the discharges. It is not safe to scrape the uterine surface more than can be avoided, for fear of opening up fresh avenues by which septic materials may reach the system, since we know that nature interposes a bar to infection by glazing over denuded surfaces and closing gaping vessels. For this reason Lusk remarks that 'Fatal results are, however, rare, as decomposition is usually a late occurrence, setting in, as a rule, only after protective granulations have formed upon the uterine mucous membrane and after the complete closure of the uterine sinuses.' "—*Pacific Medical and Surgical Journal.*

PELLETIERINE, A NEW TÆNIFUGE.

By John L. Dickey, A.M., M.D.
(*Class of* 1882.)
Of Wheeling West Virginia.

A recent valuable addition to the remedies used against tænia in pelletierine. It is an alkaloid derived from the root-bark and stem-bark of granatum. It was discovered in 1878, by Tanret, and was named in honor of another eminent French chemist, Pelletier.

The powder is grayish-yellow in color. The dose is given by one authority as two and a-half grains

by another, fifteen. The preparation most largely used is gotton up in a proprietary form by a Tanret, under the name of "Tanret's, Pelletierine." It is of the color and consistence of maple syrup, and has a sweet and pleasant, but slightly astringent taste. Each bottle contains an ounce, which is the adult dose. An objection to it is the price, three dollars a bottle. Following is a case in which it was used:—

Percy M., æt. 10, had been suffering from a tapewarm for three or four years. While the family lived in Cleveland he had been treated by several physicians at different times; large portions of the worm had been expelled, but the head still remained. Over a year ago the family removed to this city and the boy had been treated by a physician, who succeeded in getting large sections of the worm, but not the head. The case came into my hands, and half a bottle of "Tantret's Pelletierine" was administered on an empty stomach, but owing to the impossibility of getting the boy to take a sufficient cathartic we failed to get the whole worm. Several weeks later, another and more successful attempt was made.

The boy was given a glass of milk only, for supper, and the next morning for breakfast he took another glass of milk containing the remainder of the bottle of pelletierine, about half an ounce, without knowing he had taken any medicine. Half an hour later he was given a full dose of compound cathartic elixir, but his sensitive stomach rebelled, and the elixir was vomited. A still more palatable cathartic was given, in the shape of half a bottle of citrate of magnesia, and at two o'clock I called and found him on the *pot de chambre*, having passed a large, watery stool and about half of the worm. Without removing him or breaking off the worm, I gave him an enema of about twenty ounces of tepid water and soap-suds, containing a drachm of common table salt. In a few minutes the injection was expelled with more of the worm and taking hold of it and drawing it gently away hand over hand, the whole worm was soon withdrawn, the small head and suckers being nearly visible to the naked eye. It measured about sixteen feet in length. Under a microscope, the four suckers and central fringe of hooklets proved it to be a tænia solium.

The advantages of this preparation of pelletierine over other tænifuges are its quick action and its pleasant taste and easy administration. I had seen it successfully used last winter, by Prof. Da Costa, at the Jefferson College Hospital clinic, in a case that had resisted all the well-known remedies.

Giving the injection and gently drawing away the worm I consider important parts of the treatment in the above-mentioned case. It is probable that very often tænia are expelled as far as the lower bowel and that a part of the tangled mass is retained by the sphincter, thus giving the head a chance to reattach itself. The worm did not once break in drawing on it, but was tough and elastic. After a few minutes exposure to the air, however, it became brittle and broke easily.—*Medical News, March* 29, 1884.

CHRONIC NASAL CATARRH.

Dr. Addison Hickey thus closes an interesting article on this subject in the *Medical Herald*:

In the treatment of this disease the first thing to be done is to thoroughly cleanse the parts. This is of paramount importance. The means employed to accomplish this should be mild and non-irritating. Anything which produces pain which lasts longer than a few seconds should not be used. I usually use for cleansing purposes the following mixture, which is a modification of "Dobell's solution":

R	Sodæ bicarb,		
	Sodæ biborate,	aa	℥ ss.
	Glycerine,		℥ ij,
	Listerine,		℥ j,
	Aquæ,		℥ v. M.
	Ft. sol.		

This solution, when used slightly warmed, produces a very pleasant sensation, and is excellent for cleaning and disenfecting the nasal cavity.

It should be used in the form of a spray, and Rumbold's, or preferable Sass's spray-producers are the best instructions for accompliseing this purpose. Unless there is a large accumulation of mucus or mucu-purulent matter in the nasal passages (or vault of pharynx) a detergent is unnecessary. In many cases the passages can be throroughly cleansed by blowing the nose vigorously.

I propose now to very briefly review the method of treatment employed in each of the varieties of nasal catarrh alluded to.

1. Chronic Coryza (catarrh). In the treatment of this variety, as well as most of the others, I use, with some modification, the method originated by Dr. Rumbold. This consists in useing in the form of a spray vaseline and ext. pinus canadensis. Unlike the distinguished author alluded to I have added to my armamentarium many other remedies besides the two mentioned. I use vaseline as a menstrum for the remedies employed, and it is the best, I think, that can be used in the treatment of diseases of the upper air-passages, for the following reason: First, it is soothing, hence non-irritating; second, it softens the hard, dry crusts of adhering mucus, and renders cleansing easier and more efficacious; third, it adheres to the parts and thus keeps the remedies in contact with the diseased structures longer and better than an aqueous solution can; fourth, it does not cause the fullness and unpleasant sensation in the head that is usually complained of when an aqueous medicament is used; fifth, it can be applied warm.

The various cleansing and astringent (or curative ?) solutions that are generally used produce such pain and discomfort that they are never resorted to except when the annoyance and pain caused by the disease compel the sufferer to resort to something for relief. I have altered somewhat the formula used by Dr. R. of pinus canadensis, and use the following :

℞	Ext. pinus canadensis,	ʒ j,
	Acid carbolic, C. P.	grs. iiss,
	Glycerine,	ʒ vj,
	Aquæ fervens,	ʒ ij, M.

Of this mixture from one to three drops in half a drachm of vaseline, "applied by means of such spray-producers as will make direct application to the whole diseased surface," used every other day, will soon relieve this trouble. I am frequently asked how I convert vaseline into a spray, it being a semi-solid? The answer is easy enough. First convert it into a liquid by heat. The whole spray-producer should be made warm, almost hot by placing it over the gas or spirit-lamp, before the vaseline is put into the bowl. If this is not done the vaseline will not flow into the tubular portion of the instrument, consequently no spray will issue on passing compressed air through it. In order to mix the medicants after they have been placed in the bowl of the instrument, "you simply place your finger lightly on the point where the spray comes out, and allow a small quantity of air to pass through the instrument. The pressure on the point turns a part of the air into the upper tube, causes air bubbles in the bowl. The rising bubbles cause the two kinds of liquid to mix."

I spray, first, the vault of the pharynx; second, the post-nasal opening; third, the ant. nares using the same medicament in each instrument.

2. Hypertrophic Nasal Catarrh. This is the most difficult and intractable variety of the disease with which we have to deal, a surgical operation (removing the hypertrophied membrane) frequently being necessary to effect a cure. After thorougoly cleansing the parts with the solution alluded to, I use, generally, glycerole tannin, two to six drops, in half drachm of vaseline, in the same manner as in treating chronic nasal catarrh. When this does not produce the desired result, great good can be accomplished by using alternately either zinc chlor. or zinc sulph., one part to four of glycerine ; of the latter from one to three drops in half drachm of vaseline, and used in the same manner as above described.

I have obtained better results from the use of tannic acid, in the form of the glycerole, in the treatment of this form of catarrh, than from any other remedy. I have occasionally used with good results iodoform as recommended by Dr. Beverly Robinson, of New York, by means of the insufflator, alternating this with the above mentioned treatment.

Atrophic Nasal Catarrh. In this form of the disease a detergent is always necessary in the beginning of the treatment. After thoroughly accomplishing this, use of dinus canadensis mixt. two to five drops, eucalyptol half drop, in half drachm vaseline, and spray the entire nasal and post-nasal cavities. I have found this combination to give very gratifying results in the majority of cases of this variety of catarrh. I have frequently had cases in which pulv. sanguinaria had a very good effect. This was used with the powder insufflator, according to the method and formula of Dr. F. Bosworth, of New York.

Fetid Nasal Catarrh. In this variety I make use of the same treatment as in atrophic nasal catarrh, increasing the eucalyptol to one or two drops, and using the iodoform powder once a week alternately, instead of the sanguinaria.

Ozena. This being a disease of the accessory sinuses of the nasal cavities, and due as a rule, to syphilis or struma, the cause is first ascertained and if possible removed. The nasal cavities are to be kept cleansed, and the vaseline and eucalyptol used twice a week.—*Medical Digest.*

PALATABLE DRUGS FOR CHILDREN.

By Frederick Churchill, M.D., F.R.C.S.

We owe it, probably, much to the persistency with which practitioners of the sterner sort have impressed their rhubarb and black draughts upon rebellious children, in defiance of the protestations of nurses and mothers, that "the tasteless globule" has found such favor with the weaker sex. I could tell of several cases where the children have been entrusted to the care of a homœopath, while the parents luxuriate under the usual heroic treatment of the orthodox practitioner. We must not forget to swim with the tide. Children of this enlightened age are far more pampered and spoiled than those of the previous generation. Mothers seem unable to control their feelings; or, it may be that, with a smattering of physic lore, they find that there is no longer any necessity to cling to the once inevitable and nauseous potion. We must say a word, too, for the children. None of us like compulsion. It must not be forgotten that there is often more harm done to a child's nervous system, by cramming the draught down its throat than all the good the nauseous drug was supposed to effect. Children will often take days to recover their equilibrium after a protracted encounter with the medicine-glass in the nursery, under the stern discipline of a would-be conscientious nurse. Judging from the varied susceptibilities and dispositions of the children under my care, some of them having very resolute wills, others possessing—I cannot say endowed with—mothers of a pronounced æsthetic-temperament, to whom everything is a bore, except a novel to read and a sofa to lie upon, it becomes most important to formulate a line of treatment that will satisfy such requirements.

This class of children are generally ruled by a domineering old woman they call "nurse," displaying a maximum of "tall talk," with a minimum of what she delights to call "common sense" (and very common indeed it proves to be). The medical man must cultivate a habit of attacking such a stronghold of prejudice and conceit by a series of carefully-planned flank movements, in such a way that the nursery magnate may be drawn, against her own convictions, into a pliable frame of mind, sufficient to enable the medical man's physic and regimen to stand a chance of being attended to.

To attempt to invade the sanctum of a nursery where the lady-paramount is cajoled into the idea that "nurse is a treasure" and prefers rather to foster the notion than to care to have her eyes opened to the actual state of reigning ignorance, requires all the practical art of the medical man gradually to overcome and remedy.

Undoubtedly the ailments under which children for the most part suffer belong to the preventible class. They are due sometimes to overfeeding; very often to neglect, especially of the calls of nature; and very much to general bad management. With this view, it may be well to presume that the best and most approved mode of treatment for habitual torpidity of the bowels is not medicine, but an enema of soap and water, with occasionally a little castor or olive oil added to the injection. If this do not succeed, and the child's appetite begins to fail, it is an indication for administering medicine by the mouth.

Fortunately, the art of the apothecary comes in to our aid, and we are now enabled to give the most nauseous of drugs—castor oil—absolutely free from taste and smell, while it retains the aperient properties of ordinary castor oil. Messrs. Allan and Hanburys themselves advise that it should be shaken up with three or four times its bulk of hot milk. The viscidity of the oil is thus avoided, and the emulsion produced is scarcely distinguishable from warm rich milk.

If it be desirable to administer an aperient that will act more directly on the liver, and to avoid the unpleasant effects which often arise after taking "oil," the compound rhubarb pill will be found a serviceable aperient. Of course, some new method for its administration will be desired, which I shall now detail. Either an ordinary five-grain pill may be cut up, and a portion of it broken in small pieces may be buried in a chocolate-cream, which the youngest child will take with avidity; or, for children of, say, five years and upwards, I have given one-half and one-fourth of a grain of this pill, thinly coated. Half-a-dozen or so may be taken, like "hundreds and thousands," and washed down with milk and water.

The medicated fruit lozenges are very useful, *e. g.*, tamar indien and laxora lozenges. Podophyllin is probably one of the active ingredients in these lozenges. Only a small portion of a lozenge must be given to a child. The objection found with these is that they sometimes "gripe" the little patient. Next to these, perhaps, in efficiency and palatability is the compound liquorice powder containing senna powder. About a teaspoonful stirred up with warm milk may be taken at bedtime, and a little chloric ether added (about ten to twenty drops). Very few children will object to take fluid magnesia or the calcined magnesia, especially if flavored with the syrup of mulberry or orange.

I have succeeded in masking the taste of many powders by the addition of powdered "rose" lozenge. I very seldom prescribe Gregory's powder, on account of its nauseous character and bulk. I prefer to combine the rhubarb with bicarbonate of soda, about five grains of each. This makes a much more miscible and manageable powder. Given in jam, honey or golden syrup, the taste is altogether covered.

Children will sometimes take the "baume de vie," or decoction of aloes, without objecting much. A little of this rubbed into the stomach of infants will suffice sometimes to procure an action of the bowels. The extract of liquorice may be added to the decoction until the bitter taste is sufficiently masked. Children have not really such an aversion to it, for I have known them to lick off the aloes from their fingers when put on to prevent them from sucking them. Powdered aloes, about half a teaspoonful, may be given mixed with brown sugar. The electuary of senna is taken without difficulty by some children, also the syrup of senna and the infusion with prunes. The effervescing purgative lemonade is a very agreeable drink, as also half a seidlitz powder flavored with lemon juice.

Turning now to febrifuge mixtures, there is not much need of flavoring to mask the flavor of these. Sweet nitre, acetate of ammonia, spirits of chloroform, are all pleasant drugs to take. The nitrate and chlorate of potash are rather saltish, but the sal prunelle and Wyeth's compressed tablets will be taken by the bigger children without much protest. The syrups of orange, lemon, and mulberry will come in as agreeable and cooling adjuncts. Cough-mixtures can generally be made very pleasant by the addition of syrup of squills of tolu, etc.

As regards tonics, some considerable skill will be necessary efficiently to cover the bitter flavor. Children will take the saccharated carbonate of iron very well, and also steel wine; but if we attempt to give the bitter infusions, there is sure to be rebellion in the nursery. Quinine—one of the most valuable medicines for children—can be given without difficulty, either in the form of pill or, which I prefer, dissolved in syrup of orange, without the addition of any water. This effectually covers the flavor. Quinine wine is useful for the elder children.

Chemical food is, of course, taken with relish, and if recently made is a serviceable tonic; but the phosphates, from their insolubility, throw down very much. The compound solution of the hypophosphites, in ten-minim doses, and the hypophos-

phite wine, forms a perfect substitute for Parrish's food. Besides having iron, in a form which is easily absorbed, the hypophosphite of magnesia serves as a useful antacid and stomachic in this combination.—*British Med. Journal.*

SOME THOUGHTS CONCERNING OLD REMEDIES NOW CONSIDERED ALMOST OBSOLETE BY PHYSICIANS,—TARTAR EMETIC, FOR EXAMPLE.

By HARVEY L. BYRD, M.D.

President and Professor of Obstetrics and Diseases of Women and Children in the Baltimore Medical College, Baltimore, Md.

Whilst the present age may be considered generally as a progressive one, and in a great many respects is really such in fact, as may be seen in the numerous accessions that have been made in various arts and in many departments of science likewise, which are seemingly permanent additions to what was known before, and, therefore, calculated to benefit mankind in various ways, yet so far as it relates to the medical profession it cannot be properly regarded as a utilitarian one, certainly not in the broad acceptation in which some have thought proper to apply that term to the advancements taking place in the latter half of the nineteenth century. Hence we pause to consider that it is lacking in conservatism, in our calling at least, in a conspicuous degree.

The adaptation of means to ends that so generally marks discoveries as they are utilized from day to day at the present time, in a manner and to a degree probably never equalled before in the various arts and sciences, including medicine, would seem to indicate that an attempt like this to revive an old remedy and bring it prominently before the profession would be truly "a work of supererogation."

But when the thoughtful mind reverts to the great benefits it has seen result from *tartar emetic* and contemplates and compares the action of the remedies that have been substituted for it and the results obtained, there will be found sufficient reason to "give us pause," and to ascertain whether our great zeal in behalf of *new remedies* is not causing us to drift away from that which is good to that or those remedies which are no better at least than it is, and whether or not the tendency of the profession is to ignore many other old remedies and useful experiences of past ages, and press them to the rear, where they have not been actually forgotten, when making plans for new discoveries or new facts in the healing art. Again, it may be observed of a few modern remedies even, or those of comparatively recent introduction, that the tendency in some instances is to permit them to fall still-born ere sufficient time is given for their proper development or utilization, because unsupported by the sanction of a great name, in order, seemingly, to afford larger space for others that appear to offer more brilliant prospects of usefulness to the profession or a wider fame to the discoverer.

Whilst always ready to remove obstructions and to facilitate progress and discovery by all proper means, I often think that more enduring and substantial results would be certainly reached if we could delay just long enough to "prove all things and to hold fast only to that which is good" in medicine, as is done in almost all the other departments of human affairs.

I am emboldened to step to the front in the advocacy of *tartar emetic*, from seeing the good effects upon the profession that followed an article I had the temerity to publish in the *Medical and Surgical Reporter* of Philadelphia, in 1872, entitled "Blood-Letting in Disease."

I am thoroughly satisfied, after four decades of experience as a physician engaged in active professional work, that, next to blood-letting, the tartrate of antimony and potash is absolutely without a peer or rival as an antiphlogistic agent in our therapeutic resources, and that it may in some cases be substituted for blood-letting, even, without detriment, when certain circumstances or conditions do not absolutely demand the use of that old and peerless remedy in inflammation.

I am conscious of the import of the language I am using, and desire that I may not be misunderstood in regard to it. And I wish to add, still further, that, like blood-letting, the *necessity* for its use in practice is now as great as it ever was at any time in the history of the article. After venesection, in acute inflammatory affections, I have found it produce its most strikingly marked beneficial effects, and feel fully warranted in saying that the most sceptical member of the profession would not doubt its wondrous power for good could its action be observed in a single case. But, as already stated above, its field of usefulness covers absolutely all cases of febrile and inflammatory affections that are unattended with inflammatory or considerable irritation of the gastric mucous membrane. Those conditions only contra-indicate its internal employment in any form of disease whatsoever, or in any pathological condition attended with a full or even moderately tense and quick pulse, with dry skin and paucity of the secretions generally. It will be seen from these statements that, with the single exception of calomel, it is capable of doing good in a larger number of diseases than any other remedy in the hands of the medical practitioner. With these remarks I might conclude this paper, and, were I not aware of the fact that there are a large number of practitioners who have never used the article at all, would probably be inclined to do so. But for the use of such, and of those who have permitted other and more recent articles to monopolize its place in their therapeutic resources, I feel that the interests of science demand that a few more words

should be added regarding its mode of administration, etc.

In doses of from one-eightieth to one-tenth of a grain, alone or in conjunction with opium or one of its salts or preparations, I expect good results from it when given as an antiphlogistic or antipyretic, expectorant, diaphoretic, diuretic, or as an alterative. I never prescribe it as an emetic, unless no other article of that class is convenient, and am not prepared to speak of its *tolerance*, as mentioned by Rasori many years ago, in acute diseases from personal experience. Thus, I find it a valuable agent in most forms of fever, in bronchitis, in pneumonia, in croup and laryngitis, in torpid conditions of the liver, in certain chronic cutaneous diseases, and in sick-headache, etc. It is as valuable in lessening the force and frequency of the circulation as veratrum or aconite, and, being tasteless in the proper dose, is almost absolutely free from disagreeable or unpleasant effects, and thus is generally preferable to either of them.

The foregoing strong commendation of tartar emetic in this paper will be endorsed, I feel quite sure, by those practitioners who would preserve the old landmarks in our therapeutics, and are unwilling to drift too far away from the moorings of well-tried experience, merely to follow fashion or for the sake of novelty in practice. And, if it should prove the means of adding a most valuable and trustworthy article to the therapeutic repertory of a physician unaccustomed to or inexperienced in its use in the treatment of his patients, another most important object will have resulted from its preparation and its publication in the *Medical Times.—Phil. Medical Times.*

THE CANADA MEDICAL RECORD

A Monthly Journal of Medicine and Surgery.

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SUBSCRIPTION TWO DOLLARS PER ANNUM.

All communications and Exchanges must be addressed to the Editors, Drawer 356, Post Office, Montreal.

MONTREAL, MAY, 1884.

PERSONAL.

The *Panama Star* of April 15th says:—

Dr. George Nelson, (C.M., M.D., Bishop's College, 1880) late doctor of the Central Hospital of the Canal Company at Huerta Galla, leaves today by the *San Blas* for Santa Barbara, California. He has made many friends in the service and among the public, and carries with him the heartiest wishes of all his friends that he may return to his post in a few months in renewed health. It also says: we learn that Dr. Wolfred Nelson (C.M., M.D., Bishop's College 1872), has declined the appointment tendered him by the State Government as a member of the Board of Health.

Dr. Frank Nelson (M.D., Savannah Medical College, 1884), and late a student of Bishop's College Faculty of Medicine, left Montreal early in May to join his brother George in California. His health is, we regret to say, far from being robust.

Dr. Roddick, Professor of Clinical Surgery McGill University and one of the Editors of the *Canada Medical and Surgical Journal*, has returned to Montreal after an absence of more than six months in Europe.

Dr. James Bell (M.D., McGill, 1877), late Medical Superintendent of the Montreal General Hospital has commenced practice in Montreal.

Dr. Gray (M.D., McGill, 1883) nas been elected Medical Superintendent of the Montreal General Hospital. His appointment is for a year.

Dr. John Gardner (M.D., McGill, 1883), late one of the interiors of the Montreal General Hospital, has commenced practice at Point St. Charles, Montreal.

Dr. Wm. Stephens (M.D., McGill, 1881) has resumed practice in Montreal. He passed the Winter in Vienna.

Dr. Buller of Montreal became a Benedict on the 16th of April last and Dr. G. T. Ross of Montreal followed suit early in May. Both please accept an Editor's congratulations.

Dr. Dickinson (M.D., McGill, 1846), of Cornwall, Ont., is dead. He was one of the noble men who served at Grosse Isle Quarantine Station, during the terrible epidemic of typhus fever in 1847. His career subsequently was a most honorable one, and he died beloved and respected by all.

The following changes have taken place in the Medical Faculty of Bishop's College, owing to the removal of Dr. Young to China, and the resignation of Dr. Kennedy of the chair of Obstetrics and of Dr. Foley of the chair of Anatomy:

Dr. D. D. Gaherty (C.M., M.D., Bishop's, 1879) has been appointed Professor of Anatomy.

Dr. H. L. Reddy has been appointed Professor of Medical Jurisprudence.

Dr. Cameron has been appointed Professor of Obstetrics and Diseases of Children.

Dr. McConnell will combine Therapeutics with Materi Medica, and is now Professor of both these branches.

Mr. J. T. Donald, M.A., F.C.S., has been appointed Professor of Chemistry.

THE CANADA MEDICAL RECORD.

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Original Communications.

ERYSIPELAS AND DOUBLE CEREBRAL ABSCESS.

By GEORGE E. ARMSTRONG, M. D., Professor of Physiology, University of Bishop's College, Montreal.

Read before the Medico-Chirurgical Society of Montreal.

MR. PRESIDENT and GENTLEMEN,—Cerebral abscess, from whatever cause, being a comparatively rare disease, it falling to the lot of no man to see many cases, I think it well to report and place upon record a case that occurred in my practice a little more than a year ago.

From a pretty full daily record of the case taken at the time, I have taken the following report.

F. F., æt. 17 years, a well developed lad of average height and spare build, a student, was first seen Thursday, 15th February, 1883. Since the fall he has applied himself pretty constantly to his books, but has been in good health until about three (3) weeks ago, when he complained of indisposition to work; his appetite became capricious, and he suffered from headache, the pain being limited to the vertex. His family history is negative. Last Saturday, five (5) days before my first visit, he first noticed a small pimple on the right side of his nose. At my first visit he complained of severe pain in the top of his head. Complete anorexia. Bowels had moved naturally that morning. Tongue had a thin white coat. The bridge and both sides of the nose were red, swollen, hot, and painful, and on the right side was a large sebacious follice distended with pus, surrounded by several other ones in the same condition. These were relieved of their contents by expression, and he was put upon treatment which included a liberal supply of nourishment and rest in bed.

During the two following days the erysipelas extended over both cheeks and upwards over the lower half of the forehead. There was very little constitutional disturbance, with the exception of the continuance of the pain in the top of the head.

18th. July.—Had a slight chill this morning at 9 o'clock. Pulse 92, T. 104; F. Headache continues, tongue pretty clean, a little nausea present but no vomiting, bowels not moved for two days, surface of body moist with perspiration. Erysipelas has not spread since last note. Heart and lungs normal. Hepatic and splenic dullness normal. Ordered a powder of Hydrarg. subchlor. and P. Jalapæ Co.

20th. Headache still continues very severe and remains limited to the vertex. The pain is so severe that he cannot rest or sleep. Finds some relief from an ice cap. The head and neck seem fixed and extended, and he is unable to bend his head forward. He answers correctly any question put to him, but speaks in a slow and drawling manner. Says he can hear nothing in right ear. There is no discharge from the ext. auditory meatus; a little pocket of pus has formed on right side of nose near right eye, which I opened freely. There is a good deal of œdema of the subconjunctival areolar tissue of the right eye. Bowels moved freely after the powder.

T. 100 F. and pulse very slow, only 56 beats in the minute. No chill and no sweating—Gave the right eye in charge of Dr. Proudfoot.

23rd., 10 a. m. P. 68. and intermittent, T. 103. 5,

R. 30. Seen in consultation to-day by Dr. R. P. Howard. Dr. Howard agreed with me as to the gravity of the symptoms, and considered that the true nature of the nervous symptoms especially, was yet a doubtful question. I freely opened a pocket of pus situated in the middle line of the forehead between the two frontal eminences.

24th., 10 a. m. Passed a very restless night until 4-30 a. m. when he dropped off to sleep. A mild delirium is present. When questions are addressed to him, he sometimes answers them correctly and sometimes incorrectly, and sometimes will not reply at all—P. 80 when he is quiet, but if aroused it falls to 74.; T. 102. 6 F.—6 p. m. Has slept six hours since morning visit. Very little delirium during the day. Answers questions much more promptly than in the morning. Pupils normal and react to light. P. 64, T. 102. 5, R. 28. Opened a small collection of pus at root of nose below incision on forehead.

25th., 11 a. m. Has passed a good nigh t, sleeping most of the time, very little delirium. P. 66 and regular, T. 101.8, R. 28. Takes plenty of beef-tea, and milk and eggs. Pus coming freely from both incisions in forehead. Answers questions rationally but a little slowly. Speech is thick.—8 30 p. m. There is noticed this evening a slight twitching of the arms and body. No paralysis of any muscle. Sensation normal.

26th. Condition same as yesterday. I gave exit to a collection of pus which pointed at the inner and upper angle of the right upper eye-lid.

27th. Feb. Condition unchanged. Incisions on forehead and root of nose quite healed up. I gave ether, and Dr. Proudfoot carried an incision back along the upper and inner angle of orbit quite to the apex. Considerable pus flowed out, and a tent of lint was introduced and a linseed meal poultice applied.

1st. March. Passed a very restless night, suffering intensely from the pain in his head. P. 54, T. 101. 8, R. 24.

6 p. m.. Has slept quietly nearly all day, being awakened occasionally for food and medicine. P. 56, R. 24.

3rd. Says he has no headache to-day, Answers more intelligently when spoken to.—Ear and face look much better. Still quite deaf in right ear. Emaciation is general and very noticeable. No chills and no sweating. P. 62, T. 99, R. 21.

5th. Since last note he has suffered intensely from paroxysms of headache, at times being with difficulty retained in bed. His breathing is intermittent, and he is continually moaning. I have repeatedly stood beside him, watch in hand, for ¾ of a minute, without being able to detect any sign of respiration, then there would occur 2 or 3 quick short respirations followed again by this long intermission. Speaks intelligently when spoken to, but in a slow and drawling thick manner. This morning says he has no pain in his head, and that he had none during the night; can now bend his head forward a little. P. 80, T. 100. 4, R. 16. Dr. Howard saw him again to-day. Dr. Proudfoot examined the eyes to-day with the opthalmoscope, and reported in the right eye a slight papillitis. No engorgement of vessels ; 3 or 4 large veins were observed, but they were not tortuous ; margin of disk a little indistinct on inner side. No pulsation of vessels visible.

8th. March. Slept a good deal last night. Complains of a little frontal headache. Moaning continues, no delirium; will follow an idea clearly for several minutes, but is becoming irritable. No chills or sweating, no paralysis. Bowels and bladder act regularly. Takes nourishment well, and retains it. Hands and feet cold—ordered extremities wrapped in cotton wool, and whiskey to be given internally. P. 60, T.97. 8, R. 22.

10th. Vomited twice last night, very marked retraction of abdomen. Any slight exertion is followed by intermittent breathing. Emaciation is now extreme.

20th. March. Since last note his condition has been daily growing worse ; vomiting has continued, and the right eye-ball has been daily becoming more prominent, evidently pushed forward by something behind it. Drs. Howard and Proudfoot met me to-day in consultation, and confirmed my opinion that pus had formed behind the eye-ball and was pushing it out. Ether was administered and three openings were made by Dr. Proudfoot, one along the sup. int. angle, one along the inf. int angle, and one along the inf. ext. angle of the orbit, each extending quite back to the apex. Considerable quantities of pus came from each opening made. It was the opinion at the time that the obstinate vomiting was reflex, and dependent upon the suppuration in the orbit. Pulse before the operation was 102, and after the effect of the anæsthetic had passed off the pulse was 80.

30th March.—Since last note patient has been in much the same condition as then reported. Vomiting continues. Emaciation progresses rapidly.

There is no headache and no delirium. Can see pretty well with right eye, which has receded to nearly the level of the other, and the incisions are healing from the bottom. Is still deaf in right ear. Can bend head forward.

The subsequent history of the case is simply that of gradual failure of the vital powers. Extreme emaciation, and death on the 14th April, 1883. Duration of illness, 8 weeks and 2 days.

In regard to the treatment there is nothing unusual to note. The Tinct. Ferri Mur. and Pot. Chlor. given in large doses. Quinine, grs. 5 or 10 were given night and morning, and the patient's strength supported by a liberal diet of concentrated and easily digested food. Stimulants were given very freely. I obtained great benefit in this case from the peptonized beef-tea and milk, giving them by the mouth, and when the vomiting began I gave them freely by the bowels, and they were generally very well retained.

At the necropsy only the contents of the calvaria and orbit were examined. The apex of the orbit and the parts in the immediate vicinity appeared normal. The membranes of the brain were normal with the exception of that portion of the dura-mater which covers the petrous portion of the right temporal bone. In this situation the dura-mater was of a very dark color, thickened and softened. The arachnoid and the piamater in this situation presenting a normal appearance.

The surface of the brain was everywhere of normal appearance. When the brain was turned over, pus was seen to issue from the under surface of the occipital lobe. Upon examining more carefully an abscess was found in each hemisphere, and similarly situated on either side. They occupied the centre of the occipital and part of the parietal lobes. They were not encysted. The pus was white and odourless. They were apparently confined to the central white matter, not involving the cortex. They were each about the size of an English walnut. The brain was so soft and friable that I was unable to determine with any degree of certainty whether the two abscesses communicated with the lateral ventricles and through them with each other.

The longitudinal sinuses were healthy. As to the etiology of the abscesses, I think there are two views of the case that might reasonably be taken. The first is that of a phlegmenous erysipelas of the face, causing a condition of pyæmia, with the cerebral abscesses as a result. In this case the abscess would have been metastatic, as there was no extension backward into the cavity of the skull from the orbit, as in a case reported by Mair, and there was no post-mortem evidence of the inflammation being transmitted from the nasal to the cerebral cavity as in two cases mentioned by Gull. On the other hand, although, as stated by Hugnenin, "the absolute proof of the direct embolic orifice of an abscess of the brain, the accurate demonstration of the infectious embolus is still wanting, we find, nevertheless, important evidence of it in an observation of Boettchen. He found in the cavity of an abscess of the brain which was consecutive to abscess of the lung, a pigment which he was able to declare to be lung pigment." The fact of there being two abscesses, one in each hemisphere, would support the view of the abscess being embolic.

The second theory of the etiology of the abscesses is suggested by the finding of the dura covering the right tympanum in a necrosed condition, and by the continued deafness in the right ear. If this view of the cause be accepted, and Toynbee's law be applied, the disease would have been in the tympanum, which according to him stands in a relative connection with the cerebrum.

Gull, Sutton, Prescott Hewett, Wilks, Aitken, Hammond, and Agnew, all mention disease of the middle and internal ear as a common cause of abscess of the brain.

Hugnenin, the author of the article on encephalitis in Ziemssen, states that abscesses of the brain, which are secondary to affections of the ear, appear to be slightly more numerous than those which arise from injury. The fact of there being no perforation of the tympanum, and the fact of there being healthy brain substance between the bone and the abscess cavity, does not prove that the abscess was not the result of disease of the internal ear. Wilks says he has seen an abscess with a perfectly healthy portion of brain outside, and it was supposed that purulent imflammation had extended to it from the internal ear by means of a vein in the aquæductus vestibuli. That there was a meningitis in the upper cervical region causing the fixity and slight extension of the head, is very probable.

Many of the symptoms one usually looks for in cerebral abscesses were wanting, for example, with the exception of the slight twitching of the arms and legs on the 25th February, there was no

epileptiform seizure, no rigors. There was no paryalsis, either local or general, no incontinence of urine or fæces, no vertigo, no disordered sensibility, no defective sight, no coma. The prominent symptoms were severe headache, delirium, vomiting, a slow defective articulation, slow pulse and slow intermittent respiration. The last two symptoms were evidently due to the pressure of the abscesses on the brain, and simply denoted compression, which might be from any cause.

Gull and Sutton, who collected 76 cases for their article in Reynolds' System of Medicine, do not mention a slow pulse or slow respiration as occurring in any of them.

The absence of paralysis is explained by the matter being confined to the central white matter of the brain.

The erysipelas would then be regarded as an intercurrent affection.

ONTARIO MEDICAL ASSOCIATION MEETING.

The Canadian Practitioner says :—This Association held its Fourth Annual Meeting in Hamilton on the 4th and 5th of June. Although in point of numbers it fell behind its predecessors, in the amount of work accomplished, and in the harmony of feeling which pervaded its deliberations, it was far ahead of any previous meeting. The character of the papers read was decidedly above the average, and were pretty well distributed over the various sections of the country.

The president's address was replete with wit, and if some of his allusions were caustic, the application was so gentle, and administered with such a friendly smile, as to lose its sting. To the president s promptitude, and excellent qualities as a presiding officer, was due in a large measure the celerity with which the business of the Association was transacted without any appearance of hurry or confusion. Even with all the expedition, a number apers were perforce read by title, and the Reports of Committees—some which were most excellent and contained matters of high interest to the Profession—were taken as read, or referred to the next Session.

The new President of the Association is Dr. Worthington, of Clinton.

London has been chosen as the next place of meeting.

Society Proceedings.

MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

Stated Meeting, March 28th, 1884.

T. A. Rodger, M.D., in the Chair.

Fracture of the Femur.—The following is an abstract of a paper read by Dr. Jas. Bell on "Some Cases of Fracture of the Femur, treated by plaster-of-Paris splint." Three cases were reported, all occurring in children.

The first, a little boy 1½ years of age, with simple fracture in the middle third. The second a boy four years of age, with fracture just below the trochanter from direct violence,—being run over by a heavily-laden cart.

The third case was that of a strong, healthy boy, aged 8 years, with fracture at the junction of the upper and middle thirds. In all these cases the treatment was the same. Ether was given, the limb extended, and the fragments brought into position, and held there until a plaster splint had been applied, extending from the toes and including the pelvis and loins. Coaptation splints of pasteboard were moulded to the leg and applied between the layers of plaster bandage.

In none of these cases has there been the slightest trouble of any kind, and in each case when the plaster was removed the union was found to be most satisfactory. In the first case there was no appreciable shortening. In the second about a quarter of an inch, and in the third a little over a quarter but less than half an inch. These cases were exhibited, as also an old man aged 62 years, who had a bad compound fracture of both tibia and fibula just above the ankle-joint. The fracture of the tibia had been oblique, and about three-quarters of an inch of the protruding fragment had to be removed with the saw before it could be reduced. The limb was then permanently fixed with plaster-of-Paris, leaving the wound exposed through the small opening in the bandage. The wound was dressed with Listerian precautions, and the patient was discharged at the end of eight weeks with a sound leg. He is now doing his regular work (six months after recovery), and has been for some time, without any inconvenience. The writer, in summing up, thought that in a great many cases

the plaster-of-Paris splint was the best that could be applied to a fractured femur, notably in children, in nervous and fidgety people, and in fractures complicated with delirium tremens, also among the poorer class of patients, where a suitable bed and good nursing (which are so essential in the ordinary treatment of extension) could not be secured. He also thought that objections urged against it for fracture of the femur were very much overrated.

Dr. GURD said that he would not like to risk treating an adult's fractured femur in this way, as he feared that before union had occurred there would be no pressure around the limb, owing to the rapid atrophy which follows disuse and bandaging, thus allowing displacement of the fractured ends.

Dr. BLACKADER said he had broken the femur of an infant with the blunt hook in a difficult breech case, and, assisted by Dr. Sutherland, a gutta-percha splint was applied, which answered admirably.

Dr. Sutherland said he was going to use plaster-of-Paris splints in these cases in the future.

Dr. SHEPHERD quoted Heath as saying that there was no necessity to take in the joints where plaster-of-Paris was employed.

Dr. RODGER had lately used plaster-of-Paris splint for fracture of the femur in a child aged 5 years, with excellent results. He always uses this method of treatment for fractures of tibia and fibula.

Cases in Practice.—Dr. BELL said that this evening he had been sent for by the Coroner to make a post-mortem examination on a young man, aged 28, who had been found dead in his bed. Death was found to have been caused by the bursting of a small aneurism into the pericardium. The aneurism arose from the lower and back part of the tranverse portion of the arch. The young man had been treated as an out-door patient at the Hospital for pains in the back. Aneurism had not been detected.

Stated Meeting April 11th, 1884.

T. A. RODGER, M.D., in the chair.

Dr. TRENHOLME exhibited *two pairs of Ovaries and Tubes* lately removed. One case was operated on 22nd March. Both ovaries were much diseased, and enlarged to about four times their normal size. The patient was 32 years old, and had always suffered much at her monthly periods. Her sufferings have gradually increased year after year up to about November last, when she began to manifest symptoms of insanity of a melancholy religious character, with a suicidal tendency. Her monthly sufferings abated with the advent of the mental infirmity. The patient had been under the care of Dr. M., in Ontario, who suspected some disease of the internal organs of generation, and sent her down to Dr. T. On examination both ovaries were found to be enlarged and tender, the uterus congested, and tender, but otherwise normal. The operation was with the hope of benefiting her mental condition. The wound healed by first intention throughout, and the sutures were removed on the 5th day, not a drop of pus being present. The patient made a rapid recovery, and returned to her home before the end of the third week. But little could be determined as to the result of operation upon her mind, but, so far as could be judged, she seemed somewhat benefited. The future of this patient will be watched with interest and reported to this Society at another time.

Case 2.—Patient, aged 22, has suffered much for several years from pelvic pains, aggravated at each menstrual period. Both ovaries tender and enlarged, uterus congested and very tender, and also retroverted. Attempts at replacement and the use of a pessary had been followed by pelvic cellulitis; even with greatest care could not tolerate a pessary. Rest and local treatment relieved for a time, but when she attempted to work was again laid up. As the girl had no friends or means of support, and her health precluded service, I removed the specimens now before the Society. Both ovaries (as you see) are much enlarged, undergoing cystic changes. The tubes also very much congested. This patient has so far made most unsatisfactory progress towards recovery. There seems to be no healing power in her, and, while no dangerous symptoms threaten life, a tedious convaleseonce is looked for.

Dr. HY. HOWARD considered the first to be a case of acute dementia, and said that peripheral irritation, especially from the organs of generation, will sometimes be followed by dementia in both sexes, often taking the form of religious dementia. Dr. H. mentioned two or three cases where young men on the first night of their marriage became insane.

Purpura Hæmorrhagica.—Dr. KENNEDY mentioned that lately he had under his care four cases of this disease, all in young children of different families. He asked if other members had seen an unusual number of those cases.

Dr. REED said he had been treating one case at the Dispensary.

Nitroglycerine in Epilepsy.—DR. F. W. CAMPBELL spoke of the continued good results he is having with nitroglycerine in the treatment of epilepsy. None of the patients whom he has so treated have been entirely cured, but with all the attacks are milder and much less frequent. The usual dose which he gives is one drop of a one per cent. solution three times a day.

Dr. TRENHOLME asked for the modus operandi of this treatment.

Dr. CAMPBELL said that it was not easy to say how it acted; but if it is true, as some authorities affirm, that with epileptics there is anæmia of the brain from contraction of its arteries, then we can see how the nitroglycerine is useful, knowing, as we do, its action in dilating the blood-vessels of the head, as does smelling nitrite of amyl.

Dr. HY. HOWARD congratulated Dr. Campbell on his success in this treatment of epilepsy, and said that the Germans classified the forms of epilepsy as follows:—1st, Those due to contraction of the cerebral vessels from irritation to the vaso-motor nerves. Here bromide of potassium is very useful. 2nd, An abnormal condition of dura mater. Bromide useless. 3rd, Due to irritation of the anterior pillars of the spinal marrow. Ether spray best for this. 4th, Lesions of different parts of the brain or cord. Of course the difficulty is to be sure of the cause.

Progress of Science.

PROGNOSIS IN HEART-DISEASE—MITRAL INSUFFICIENCY OR REGURGITATION.

An abstract of a lecture delivered before the Harveian Society of London, By W. A. BROADBENT, M.D., F.R.C.P. Lond., and published in the *British Medical Journal.*

The evidence of regurgitation through the mitral orifice is a systolic murmur in the region of the apex, usually heard also to the left of this spot towards the axilla, and often in the left interscapular space, sometimes upwards round the outer side of the mamma. The only murmurs likely to be mistaken for that of mitral regurgitation are a systolic aortic murmur conducted to the apex, a tricuspid regurgitant murmur, and a spurious murmur produced by compression of the edge of the lung. These sources of error being eliminated, a systolic mitral murmur means regurgitation from the ventricle into the auricle.

The causation, however, of mitral incompetence is most varied, and the range of possibilities extreme.

There are, first, the so-called hæmic murmurs of anæmia and chlorosis, of convalescence from acute disease, of some cases of chorea, and of cardiac weakness. It is to these that Dr. McAlister's explanation of mitral reflux, without disease of the valves, applies. The complete closure of the orifice is not effected merely by the floating out of the valvular curtains, but is aided by a great constriction of the orifice, which is part of the ventricular systole. When this is imperfectly performed, the valves do not quite guard the opening, and allow regurgitation.

There is no direct relation between the degree of anæmia and the occurrence of mitral regurgitation; there may be no reflux in the worst cases of anæmia of whatever kind. The state of the blood constituting a predisposition, the immediate cause may be over-exertion, or perhaps climate, or worry. But a direct cause of dilatation of the left ventricle exists in many cases of anæmia, viz., unduly high arterial tension from resistance in the peripheral circulation. This may not only give rise to temporary insufficiency of the mitral valve, but may possibly be the cause of the organic change in it, which Dr. Goodhart has shown to be a probable result of anæmia in many instances.

This "curable mitral regurgitation," borrowing the term from Dr. George Balfour, can usually be recognised by means of the history and condition of the patient, but the character of the murmur may be of assistance; it is usually smooth, accompanies the first sound, instead of extinguishing or replacing, it and not unfrequently it is post-systolic rather than systolic. It is sometimes said that a hæmic mitral murmur is not conducted towards the axilla; but this must not be altogether relied upon.

A temporary mitral regurgitation is not uncommon after acute disease, and may follow acute rheumatism, when it is liable to be taken for the effect of endocarditis.

A mitral systolic murmur during chorea may be either the result of functional derangement or of organic disease of the valves.

In middle age, or in advanced life, mitral regurgitation, without actual change in the valves, is common, and may be induced suddenly by overstrain or illness, or come on insidiously. Sometimes the orifice is of the normal size, at others enlarged; and it is often impossible to say what its exact condition is, or to distinguish between such cases and others in which the valves are damaged. When the orifice is unduly large, there will also be dilatation of the ventricle. The character of the murmur, and especially the presence or absence of the first sound, may be of great service in deciding whether the reflux is considerable or small in amount.

Disease of the valves may be the result either of acute endocarditis, usually rheumatic, or of chronic inflammatory or degenerative change.

The kind and degree of deformity may vary greatly, and we have to endeavor to see our way to the prognosis under these diverse conditions. In some cases, the disease will prove fatal in a few months or years; in others, it may exercise little influence on the health or life. In two instances mentioned, mitral regurgitation had been ascertained to exist twenty years since in patients still living and well; and in another case, repeatedly examined within the last three years, the patient had been condemned to life-long inactivity after acute rheumatism, thirty-five years ago, but was still, at the age of sixty-four or sixty-five, doing strenuous work, a mitral murmur having been known to be present all this time. It is very common to meet with mitral regurgitation at and after the age of seventy, but its duration cannot be ascertained. This form of disease is very frequent among the out-patients of hospitals, and sends into the wards numerous cases of dropsy which recover. It is, in effect, not a deadly kind of valvular affection, and is probably less serious than aortic stenosis, which is placed lowest in the scale of danger. It is not simply that, in a large proportion of cases, the valvular change is comparatively slight; even considerable disease may be long survived, if not progressive.

The first inquiry will be as to the signs and symptoms by means of which the amount of regurgitation may be estimated.

In some cases the character of the murmur affords much information. When it is not conducted much beyond the apex, and is not heard in the back, especially when the first sound of the left ventricle is not lost, but is still audible at the apex, and particularly when the murmur does not begin with the first sound, but follows it at a brief interval, *i.e.*, post-systolic, the leakage is usually inconsiderable. Care must, of course, be taken not to take the soft short murmur of a gaping orifice and a weak heart as an indication of slight mischief, and not to mistake the short sharp first sound of mitral stenosis for a normal left ventricular first sound. Mitral systolic murmurs are often musical, and a musical note would seem to imply a narrow chink and small regurgitant stream; but observation alone must determine the significance of any particular kind of murmur.

For further evidence, the effects of regurgitation through the mitral orifice must be followed. The first of these will be distension, and then dilatation of the left auricle; but, from the deep-lying situation of this chamber, an early stage of enlargement is not easily made out. But the obstruction to the entry of blood into the auricle from the pulmonary veins will give rise to increased pressure in the pulmonary artery, audible evidence of which will be accentuation of the pulmonary second sound. It is not easy, however, to define the degree of intensification of this sound, which must be accepted as proof of obstruction at the left side of the heart; especially as obstruction may arise in the pulmonary capillaries. From the increase of pressure in the pulmonary artery, another effect follows, hypertrophy and dilatation of the right ventricle, manifested by displacement of the apex to the left, and undue impulse of the right ventricle. But the effects do not end here; the pressure maintained in the left auricle must be such as to afford resistance to the return of blood from the ventricle; and must, therefore, in extreme cases, almost equal the pressure in the aorta. Such pressure must, during the ventricular diastole, drive the blood violently into this cavity, and act as a dilating force, and dilatation will involve hypertrophy. The situation, then, of the apex-beat will be the resultant of hypertrophy and dilatation of two ventricles, and the volume of the heart, as a whole, will be greatly increased.

These changes, the result of mitral incompetence, becomes for us its measure. A systolic mitral murmur, without any of the signs enumerated, and without symptoms, is not attended by much regurgitation, and is not a source of present danger; unless it marks the beginning of progressive mischief, it may be disregarded. As the indications of pressure in the pulmonary artery and of changes in the heart increase, we infer increase in the amount of reflux, and look for diminished stability of the compensation, and expect less power of regaining a working equilibrium if it is once overthrown. These statements are of course subject to the qualifications enumerated in the first lecture.

At the risk of being tedious, one more qualification must be added. It has been pointed out how the right ventricle comes to the aid of the left by maintaining a degree of pressure in the left auricle which resists the reflux through a gaping mitral orifice. The resistance must, when the barrier of the valve is withdrawn, be greater than the pressure in the arterial system. Everything depends, therefore, upon the resistance in the capillaries and the arterioles, and this varies greatly in different conditions. If this be considerable, the arterial tension is high, the backward pressure on the auricle and pulmonary veins is great, and the demand upon the right heart is heavy—all circumstances tending to the production of dilatation and hypertrophy. If, on the other hand, the arterial tension be low, the conditions are reversed. In the case mentioned, of mitral regurgitation known to exist for thirty-five years, the pulse was extremely soft and short; and as there were at one time disquieting symptoms—a sense of constriction of the chest on slight exertion, and a liability to slight fainting attacks—it was feared that the heart was failing. The family pulse, however, is of extremely low tension, and to this the patient owes, in part, at least, his immunity.

The pulse of mitral regurgitation has still to be considered. Its characterisic is irregularity both in rhythm and force, which in advanced cases is

extreme, no two beats being alike. This irregularity, however, is not confined to mitral regurgitation; it is met with in some instances of dilatation of the left ventricle without leakage of the valves, and may be independent of all structural change. Its causation is not very clear, but it is possibly due to the varying respiratory pressure affecting the pulmonary veins and left auricle.

Up to this point it has been assumed that the compensation established has sufficed to neutralise, in a great measure, and under all ordinary circumstances, the effects of the valvular imperfection; but in many instances this is imperfectly accomplished, and the patient is short of breath on comparatively slight exertion, is subject to cough, and presents habitually evidences of venous stasis. The deficient compensation may result either from excessive amount of the regurgitation, or from a failure on the part of the heart to respond to the call for a structural change; and it would be a matter of extreme difficulty to decide between the two on a single examination, especially in the presence of complications, but observation extending over a considerable period, or a full and accurate history, would usually guide to an accurate conclusion. In either case, the leading prognostic indication would usually be the degree of derangement of the circulation and the instability of such compensation as was present.

Even when compensation has been effectual for a time, if any considerable lesion of the valve exist, permitting a serious amount of regurgitation, symptoms will arise sooner or later, either from deterioration of the muscular walls of the heart with advancing years, or from gradual dilatation of the the cavities under the continued strain, or under the influence of anæmia, or as a result of acute disease, especially of the lungs or kidneys; or acute dilatation may be brought about by overexertion, or excitement, or anxiety. These symptoms are the well known evidences of obstruction in the pulmonary circulation, and of damming back the blood in the systemic veins. The shortness of breath does not require exertion for its production, but comes on in paroxysms without apparent cause, or is habitual, amounting to dyspnœa. The face and lips are dusky, the eyes watery, the hands cold and purple. There is much cough, and the lungs may be congested or œdematous. The urine is scanty, high colored, and loaded with lithates. A further stage of the symptoms is marked by the appearance of dropsy, which may at first be represented by slight œdema of the feet and ankles, which comes and goes, but later ceases to subside, and extends up the legs. As the dropsy advances, the respiratory distress becomes more painful; the patient can no longer lie down, and, in aggravated cases, must sit on a chair or on the edge of a bed, so as to let his legs hang down. Sleep is almost impossible, and the short snatches obtained are disturbed by frightful dreams, and the patient wakes in an agony of dyspnœa and alarm. Unfortunately, the paroxysms are usually worst during the night.

When dropsy is present, or severe pulmonary complications, the prognosis depends mainly on the question whether the symptoms are the direct result of the state of the heart, or have been precipitated by some disturbing influence, such as a chill, or exposure, or fatigue, or anxiety. If no adequate exciting cause can be traced, and due care and caution have been exercised, it is not probable that treatment will reverse the fatal tendency. If the setting in of severe symptoms be explained, then the degree of antecedent dilatation and hypertrophy will furnish us with the important prognostic information already set forth.

As has been said, cases of dropsy from mitral regurgitation very often recover in hospital. The patients, belonging to a class the members of which have to earn their bread, must work hard and undergo exposure, and are frequently subject to hardship and privations. It is under such unfavorable influences that the compensation breaks down, and the reversal of these is often of itself sufficient for recovery. Similar results are furnished by private practice, examples being related.

On the other hand, a gentleman of strong build, who had suffered very little inconvenience from mitral regurgitation, established fourteen years before, but in whom extensive dilatation and hypertrophy indicated considerable reflux, began after a little overwork to suffer from cough and dyspnœa, which was soon followed by œdema of the legs, and the equilibrium thuse asily overturned was never regained.

CASE OF VESICO-VAGINAL FISTULA.

By Wm. Ralph Bell, M.D.,
New Edinburgh, Ont.

January, 6th., 1868. Mrs. T——— aged 32 years, consulted me about, as she expressed herself, a weakness of the bladder and inability to retain her urine; in bed or in a reclining posture, it dribbled away as secreted; when up she could retain it about one hour, during warm weather in summer a little longer. She attributes her complaint to her last labour about four years ago. She was attended by a midwife for two days; she would not consent to have a physician called in; at last the woman who was in attendance became so alarmed that she dispatched the husband for the nearest doctor, who on his arrival proceeded to deliver her with forceps. The child was dead; she remained in bed ten days after her delivery, and during that time the urine passed in the natural way. The first time she found the bed wet with her urine was on the twelfth night after her accouchement, and from that time to the present she has suffered from the escape of urine, and has been under treatment almost ever since; states she has tried a number of doctors without receiving any benefit; they all seemed to have looked on case as paralysis of Sphincter Vesica, caused by the pressure of the child's head or the instruments

used in delivering her. I enquired what the other medical men had done to try and relieve her.

She replied they had given her medicine. Did they examine you? She said only one had made an examination, and that, on close enquiry I found to be only digital. She says they all considered she suffered from paralysis. One doctor galvanized her night and morning for about six weeks, another gave her a prescription for some pills, each pill containing two grains of Quinine and a thirtieth of a grain of Strychnine; such had been the treatment before I saw her. On introducing a common glass vaginal speculum, I found on the left side of the mesial line and about one-inch and-a half deeper than the orifice of the urethra, a vesico-vaginal fistula was very apparent; the opening was about the size of a five-cent piece; on introducing a silver catheter through the meatus urinarius a small quantity of urine escaped through the catheter and on the contraction of the bladder a little escaped through the fistulous opening; the catheter, could be distinctly seen through the opening. Having determined the extent of the lesion, I felt satisfied that it was a suitable case on which to try the actual cautery, and having fully explained the operation to the patient and pledged her my word that it was not a painful one, she consented, and, being desirous to return home soon as possible, it was decided that it should be done in the morning.

Next morning, at the appointed time, I placed my patient on a table on her hands and knees before a good light, two female friends of the patient being present to assist me.

The vagina being well dilated by a trivalve speculum I had a splendid view of the fistulous opening; having heated a small button-headed cautery to a white heat, I applied it freely to the edges of the opening; she did not complain of any pain during its application. I filled the vagina with a long strip of lint saturated with olive oil; saw my patient comfortably in bed, gave twenty drops of tincture of opium, instructing the nurse to keep her as quiet as possible. On my calling again in the evening found she had enjoyed a nice sleep, was free from pain and in good spirits; emptied the bladder with catheter, ordered twenty drops of tincture of opium at bedtime.

8th. Called early upon my patient; found she had slept well through the night, passed catheter, no urine passed by fistula: evening passed catheter.

9th. Found her up and sitting in an armchair; complains of no pain, no urine passed through fistula, passed catheter and drew off nearly a pint of urine.

10th. Passed urine naturally, renewed the oiled lint.

12th. Was called from home yesterday and did not see my patient till to-day; she had passed urine naturally three times, the oiled lint came away when walking.

16th. She passed urine naturally; stated that on rising this morning she found her bed a little wet; on examination I found the false opening nearly all healed. I informed her I should require to touch the small opening again as it was not perfectly closed, that in the meantime she might go home for a month or five weeks and then return, when I hoped to complete the cure.

March 1st. On examination I found the fistula reduced to about the size that would admit of a small crow-quill being pushed through; on trying I could not pass the point of a No. 7 elastic bougie. Placing her in the same position as before, dilating the vagina with speculum, and having heated to a white heat the stillette wire of a No. 12 elastic catheter, I passed the tip well into the opening, making it touch all round the edges; used no dressing, but desired my patient to frequently micturate, so that the bladder might not become over-distended.

2nd. She has followed my instructions, had no pain; I allowed her to return home, desiring her to let me see her again in a few weeks.

April 17th. Received a letter from my patient informing me she had now perfect control of her urine, none having come away by the fistula; she was delighted to think she was cured; as she was feeling so well she would not visit Ottawa before June, when she would report herself.

June 9th. Mrs. P., called to-day; on examination found the fistula completely closed.—She remarked to me "I have been several times to church recently. I could not go out into public, I had not been to church for nearly four years. I was afraid to go for fear that people would notice the smell."

This case is of some interest. When the fistula is small, I find that they are readily cured by the use of the actual cautery; such has been my experience in several cases. It is better and much easier than to attempt an operation with sutures: again I must remark the operation is almost painless, it is so simple and easily done. If ordinary care is observed, it is also one that wins the life-long gratitude of the patient.

CLINICAL LECTURE ON DISEASES OF THE SKIN.

DELIVERED AT THE NEW YORK HOSPITAL BY L. DUNCAN BULKLEY, M.D.,
Physician to the Out-Patient Department—Class of Venereal and Skin Diseases.

Psoriasis Treated with Chrysophanic Acid.—Eczema Rubrum.—Eczema Rubrum with Varicose Veins.—Recurrent Eczema.—General Diffuse Papular Syphilide.

GENTLEMEN: At the beginning of each lecture we will show the patients, and, if time allows, I wish at the close to spend twenty minutes or half an hour in didactic review of what we have seen. Our clinic depends upon the material sent to us and upon our out-door service here, so that I can-

not always command the cases in the order in which I wish to present the subject. I shall therefore have to take the cases in a desultory manner, and afterward group them together. I will first show you some simple cases before we commence the study of the more obscure ones.

CASE I. PSORIASIS TREATED WITH CHRYSOPHANIC ACID.—This case is very interesting from the fact that, without our intending it, we have had quite a remarkable improvement in the eruption from a treatment which has been advised but which has not been frequently employed—namely, the internal use of copaiba. The patient came here first on account of a gonorrhœa, and not for his psoriasis, which he had had for twelve years, and was put on the treatment for gonorrhœa—on what is known as the Lafayette mixture—a mixture containing an alkali and a little spirits of nitre. When he first came, on April 12th, the psoriasis was in full bloom, very much more marked than now. He was given the mixture of copaiba, but with no local treatment, and as the gonorrhœa diminished his psoriasis greatly improved, so that now his eruption is not of half or quarter its former extent. He says there are no new spots, and, as you see, the eruption is fading. His name is J.B., aged twenty-four. He has had psoriasis for twelve years, with occasional improvement, followed by relapses or increase of the eruption from time to time, it having never entirely left him since its first appearance. What I show you now is not the eruption of psoriasis as you are apt to see it; it has decidedly faded, some of the spots have disappeared, and many are much broken into. On the elbow you will still find the white, slightly adherent, imbricated scales, which very readily come off with light scraping: they are seated on a red base, which, as always, is perfectly distinct and sharply defined, and not with the indefinite outline commonly seen in eczematous patches. On scraping off the scales lightly we soon come to a membranous pellicle, which is adherent, and, if the scraping is carried still further, this comes off and is followed by the appearance of a drop of blood. The eruption, as you see, consists of dusky-red spots, of a size varying from that of a minute pin-head to almost any size, always sharply defined, tending to cover themselves with a white scale, which, on being scraped off, leaves a red base, which bleeds very readily. Remember that the separate spots of psoriasis always appear first as small points, gradually enlarging, and that even when seen as patches of large diameter they have always thus begun; in some localities you may observe the mode of disappearance of the eruption, it gradually fading out, the scales ceasing to form, and finally the redness itself vanishing. We see on the legs very much less eruption than is usually seen on these parts; as a rule, in psoriasis, the legs have more of the eruption proportionately than the body; almost always the patches are larger on the lower extremity, more scaly, and of a darker hue.

Differential Diagnosis—Why do we speak so confidently of its being psoriasis, and state that it is absolutely impossible that it could be anything else? The reasons are found in the character of the lesions, taken in conjunction with the history of the duration of the eruption. There are only four eruptions which could with the slightest reason be supposed to be the one before us; these are: a squamous syphilitic eruption, an eczema, a ringworm, and psoriasis. First, of syphilis: this man has had the eruption for twelve years, with varying severity, and this eliminates syphilis absolutely, as such a general syphilitic eruption never continues that number of years. You may have an ulcerative syphilide for five or more years, but never an acute, distinct from this kind. In the next place, the syphilide would be on the flexor and extensor aspects alike, while in psoriasis the extensor surfaces are always the seat of preference. In the general large papular syphilitic eruption you could never have any such extensive patches of disease as are seen on this man's legs.

Second, in regard to any possible form of eczema which might be mistaken for the present eruption; Eczema seldom, if ever, presents so many separate points of eruption as are seen here; and it may be said that it never exhibits so many of such small size and so sharply defined. Upon some portions of the body psoriasis may resemble eczema, and you see the characteristics it very commonly may take on the lower extremities—namely, the patches are larger, more dusky-red, and of more undefined outline, often more resembling an eczema of the lower extremity. It would be difficult, but not impossible, to make the diagnosis from the eruption on the lip alone.

In certain points this eruption might be thought to resemble ringworm, but yet you would certainly not have such a vast expanse affected with the parasitic disease, and an examination of the scales by the microscope would show the parasite in the latter. The individual spots present differences from those of body ringworm in the pearly character of their scales, the absence of a clearing in the centre, and the rather livid redness of the base of the psoriatic spots. We then make the differential diagnosis from syphilis, eczema, psoriasis, and ringworm; and, recognizing the lesions of psoriasis, we conclude with certainty as to its nature.

This patient continued the use of the balsam of copaiba until the eruption was a good deal faded and broken up, and some weeks ago he was put upon another treatment which has recently been advocated. He has been under the internal use of chrysophanic acid, which has been reported on favorably by several observers, some claiming brilliant results from it. I have several patients under this treatment, but am not ready yet to speak definitely concerning it. He began with a quarter of a grain, in a powder with sugar of milk, taken three times a day directly after eating; and a week ago I doubled the dose. It is best always to begin with a quarter of a grain, and after a few days

give half a grain, and then a grain, until some effect is produced on the stomach or bowels. Some patients are said to have taken up to four or five grains several times daily. When you get to five grains there is sure to be purging and vomiting. He is under this treatment, and has not had any effect from it as yet; but we shall continue it for some time to come, and I propose to push this treatment in as large a number of cases as possible. I wish to give you at the present time the diagnosis and treatment in these cases as we see them, and the theory of treatment I will give you later in the course.

Case II. Eczema Rubrum.—I bring you this woman to show you a leg which is scaly. It is a case of eczema rubrum of the left leg. She is forty-three years of age, attends to her own household work, being therefore more or less constantly on her feet, and has had an eruption only on this leg. I merely want to show you that, although an eruption is scaly, although it is red, it may not be psoriasis. No case of eczema ever becomes psoriasis. The patient states that she had erysipelas eleven years ago, and that it broke out again two years ago and settled in her back. You will see a great many cases which are called erysipelas, and chronic erysipelas, of the face, etc. We all know there is no chronic erysipelas. It may be chronic by recurrence, but not such an affair as this. This is chronic eczema, which never presents numerous well-defined, sharp patches. See how uneven the edge is, and how it shades off into unhealthy skin; you get a certain amount of erythematous skin, you get it on one half of the body, or, if on the whole body, in continuous patches. This is erythema rubrum, and is one of the cases which, of all others, are perfectly treated with the rubber bandage. I am sorry I cannot put it on to-day, to let you see how to do it. I am afraid this patient does not put it on tight enough. If this leg were exposed to the open air it would crust over, and if closed up at night there would be a surface that would exude moisture. Leave it alone and exposed to the air and that moisture tends to dry. If she had left it alone, untreated, and had scratched it, it would have a large crust; if treated with the rubber bandage there would be no crust upon it, but the scales would come off on removal of the bandage. She states that she left off the bandage for over a year, and that the leg was in as good condition as this until August; but in August, from over-fatigue, she had the eruption develop in spite of the bandage. The tongue is quite indented, and considerably cut; her bowels act every day; her water is very much colored, and stains the vessel considerably. She is taking some medicine, but I do not know what it is. We expected her to say the water was stained. Most of the cases of eczema of the leg are connected with highly colored urine, with a heavy sediment of lime, or some other deposit, from imperfect elimination by the kidneys. It always recurs from over-fatigue or over-exertion.

Differential Diagnosis.—There is nothing like this disease at all, except psoriasis, and that does not come in a profuse form.

With regard to *local treatment*, the bandage is the great thing; it is an invaluable addition, and she would hardly know what to do without it. We shall later on have an opportunity to see it put on and then I will speak of the mode of treatment For *internal treatment* you generally give diuretics a cathartic, and usually some tonic with all.

I pass to you some plates of eczema, and one of these is a plate of Dr. Fox's, of eczema of one leg, the other leg having a tubing on it. I do not think that is employed now, but that Dr. Fox has himself discarded it. This form of eczema is usually attended with varicose veins, but in this case I find none.

Case III. Eczema Rubrum, with Varicose Veins.—Mrs. Deon, aged fifty-two. She has had a milk-leg—that is, the left leg was affected twenty-two years ago, and again nine years ago. About December 1, 1880, an ulcer made its appearance on the left leg, from which there are large scars, and an eruption shortly appeared after it, and gradually extended up the leg, involving the greater part of the leg when first seen, January 1, 1881. I show you these patients that come back to us, as they are instructive. We get them well to a certain extent; they leave, and there is a relapse. Many of the eruptions have a predisposition to return. She first came to see us January 26, 1881, and was here under treatment for two or three months. She got well under the rubber bandage, then she disappeared, and we did not see her again until September, 1882—a year and a half—which is, of course, a good immunity for a person who is on her feet all the time. The trouble came back in September, and it began on the 22nd, four days before she was seen. Here we have the same lesion as in the former case, accompanied with varicose veins, with very considerable varicosities of the feet. We note here an erythematous condition, which disappears entirely on pressure and readily returns on taking away my hand. You notice the œdema of all the warts. Most cases of eczema of the leg are associated with œdema, which is not necessarily owing to kidney causes. In this instance it is secondary to the milk-leg, or phlegmasia, she had first twelve years ago, and again nine years afterward.

I think, if we want to have our patients remain cured, we must require them to wear the bandage continually, just as persons with certain deformities of the body require the continual use of a bandage or truss; for, as a consequence of leaving off the bandage, we get an affair which seems like a purely local disease, but, in my judgment, is not a local disease. You see some persons with varicose veins who do not have the eruption at all, while others, without having varicose veins, have the eruption. This is, I believe, wholly constitutional. We put her upon the treatment which is commonly pre-

scribed here, and you will hear frequently of it; but I hope you will not consider it routine practice —that is, the diuretic treatment. She is taking the acetate of potassium; it relieves the congestion of the skin, and certainly removes the disease. She is now taking thirty grains three times a day, in a little rhubarb-and-soda mixture, which is mainly used. Locally she has applied an ointment of salicylic acid and balsam of Peru. I merely mention that ointment, but cannot speak further about it now; it is composed of about half a drachm of salicylic acid and a drachm of balsam of Peru to the ounce.

Case IV. Recurrent Eczema.—I now show you a case of recurring eczema in a child whom I showed you last year—a child who, when you saw her then, had an eczema all over the neck. She remained entirely well until this fall. We saw her here last March, with a history that when six months old she had an eruption lasting until eighteen months ago—I am reading the first record of March, 1881 —and this eruption had been on the head for twelve months when we saw her. The head was the seat of a squamous eruption, and all the upper part of the neck, back, and chest was likewise affected with eczema rubrum. There is some moisture there now. She is over four years old, and you see, is an exceedingly small child for her age. When you saw her last year the entire neck was the seat of a moist, exuding eruption. The head was entirely crusted over, and the child was suffering very considerably. There were enlarged glands in the neck, indicating a low vitality and a scrofulous condition. What she shows today is a small amount of scaling, which I wish you to look at closely, I want you also to see this eczema of the eyelids in a child, because such patients are taken to oculists and treated with bluestone for years, while, if treated for eczema, they would get perfectly well. You see here a swelling of the lids which would not be here if it were not for this eczematous spot, and you find the remains of eczema on the lips. That, of course, may vary to any extent; there may be a thickened eyelid, and when you find it in eczematous subjects you can be pretty sure it cannot be cured without proper constitutional treatment. There is a slightly reddened condition of the eyelids—a puffiness of the whole region of the Meibomian glands. Now, here we still see a certain amount of redness, and a certain amount of erythematous thickening, as the remains of the eczema. I have not seen her for a long time.

Eczema of the eyelids is treated frequently with stimulating solutions—with nitrate of silver, bluestone, etc., without effect, until the proper treatment for eczema is used. The erythematous condition of the neck is hardly worth seeing. She is better than she was a year or so ago. It is a little over a year since the child had any treatment at all. The scalp was crusted over and the hair matted down, and there was some eruption on the upper lid and on the arms when she came here, September 20th. She was given the syrup of the iodide of iron, a teaspoonful three times a day, and locally she was to use the ointment which you will see continually used, namely, the tar-and-zinc ointment. It is composed of half a drachm of oxide of zinc, two drachms of tar, and six drachms of simple ointment, or rose ointment. That treatment has been continued from the first; she has had nothing but the iodide of iron and the tar-and-zinc ointment. I do not generally use the treatment with the iodide of iron in eczema; that was given in my absence. Although I do not wish to reflect any discredit upon this treatment, yet I do not use it; I do not know why, but I have not been as well satisfied with it as with other treatment. I shall put the child on a little arsenic and ammonia, or the citrate of iron, or the citrate of potassium and sweet wine of iron, made with Malaga wine, under which, I think, such patients improve faster than under the iodides.

Case V. General Diffuse Papular Syphilide.—I show you quite a different eruption now, gentlemen, in a case of specific disease. I will say, once for all, that I consider it a good deal better to use the term specific disease, and I only use it for one disease—syphilis. Whenever I use the word specific it refers to that, and that alone; it saves me explanation and uncertainty. It is a case of early general diffuse, or general scattered, papular eruption from syphilis. The patient is a widow. She had one child, who died soon after birth. She has had the present eruption for the past three months. When seen a week ago, all the body, face, hands, neck, arms, and legs were covered with the grouped papular syphilide, and she has mucous patches in the mouth.

I show you the case, gentlemen, for you to compare with the first case I showed you, the case of psoriasis, which in appearance this resembles in a slight degree, Here is a moist eruption which somewhat resembles psoriasis, but the scales of specific disease are always slight as compared with psoriasis. Specific disease does not tend to cover itself with scales, except in the tubercular form. This is a little dark, a little large, and a little too prominent to be confounded with psoriasis. Here is a very interesting point: you find here what is termed psoriasis of the hand, or what is sometimes called psoriasis palmaris syphilitica. Now, in any case of psoriasis you will not find spots like that developed in the palms of the hand. If there is doubt in your mind, *there* is a point which would argue nine out of ten times in favor of its being specific disease. This is a general, large, specific papulide. This woman's primary lesion must have attacked her within six months. There is no eruption on the soles of the feet. There is sometimes seen a little circular grouping of the lesions, but it does not happen to occur in this case; when it does occur it is perfectly pathognomonic. Here is the general large papular syphilide that might have been covered with more scales, and might in certain other cases represent psoria-

sis. Here is a wax model of the lesion; they call it *syphilide palmaire*, but there is no propriety in calling it that. Now, you notice I have made this diagnosis without a word from her. I do not care whether she had the primary lesion or not; there are characteristics which are absolutely positive. You will see the spots are solid, and are erythematous, and disappear on pressure; they are not stains; they may be acute and new, and there are also some stains left from the former lesion. There is some little analgesia, or loss of sensitiveness to pain, during the early acutely developed phases of syphillis. It is more common in women than in men. I have patients on this platform into whom I could stick a pin without their knowing it. There is entire loss of sensitiveness. We have here a general diffuse papular syphilide on the face, as well as on the body, and I should suspect the face if there were none on the hands. There are features here which might be mistaken for those of acne, and might be something else; but one point would lead us to diagnosticate syphilis, and that is the scattered appearance which the lesions present —I mean covering the whole face. You see an acne group, but never see an acne on the lip in that way.

She is under the "mixed treatment." I believe in giving her a slight amount of hydrargyrum early in the disease, and I believe occasionally a little iodide added to it will help the disappearance of the eruption. She is taking a mixture with a little iodide in it, because it does hasten it, in my judgment. She has been under the treatment only a week or ten days, and the eruption is getting somewhat less than it was.

ON THE TREATMENT OF CARBUNCLE BY COMPRESSION.

Delivered in the Hospital of the University of Pennsylvania,

By JOHN ASHHURST, Jr., M.D.,

Professor of Clinical Surgery.

Reported by LOUIS J. LAUTENBACH, M. D.

This man has been already before some of my ward classes; but, as there are many present today who do not meet me in the wards, I am glad to have the opportunity of bringing him before you. He presents one of the most instructive cases which we have had in the hospital this winter.

This patient was admitted to the ward on Wednesday of last week, being ten days ago, with a very large carbuncle of three weeks' duration. It began as a pimple, and gradually increased in size. This is the usual history of a carbuncle: first, the presence of a pimple, which soon develops a central vesicle, and then, either with or without irritation, such as scratching or pricking with a pin, begins to spread, the carbuncle in a week or ten days attaining its maximum size, seldom more than four or five inches in diameter. Yesterday a week ago, measuring this carbuncle we found its dimensions to be nine inches by eight, independently of the large amount of indurated tissue around the livid mass itself. The dimensions of the carbuncle, including this indurated tissue, were at least eleven by ten inches, and it was fully three inches in depth.

A carbuncle is in reality nothing but a large boil: there is no absolute distinction between a furuncle and a carbuncle. This carbuncle is now smaller than it was when the patient came to the hospital, and it is subsiding every day, though up to the time of the patient's admission it had been steadily increasing in size.

There are some pecularities about the ulceration of a carbuncle which have not been understood until quite recently. It had long been observed that carbuncles were apt to ulcerate at numerous distinct points, giving the surface a sieve-like or cribriform appearance; but the anatomical explanation of this condition has only been furnished within a few years by an American surgeon, Dr. Collins Warren, of Boston. By microscopical examination of the skin of the back, where carbuncles usually occur, Dr. Warren has found little processes or tubes of fat connecting the deeper tissues with the surface; he has named these tubes the fatty columns, or *columnæ adiposæ;* and it is along these columns that the pus of the carbuncle, which originates as a phlegmon of the deep cellular tissue, begins to make its way to the surface. In this case there are as yet but two openings, which lie close together and probably will soon coalesce. A slough—what is popularly called the *core*—is beginning to protrude from one of these openings: it is a slough of the deep cellular tissue.

Carbuncle, while a very painful and annoying affection, is usually not a very dangerous one when properly treated. Death does, however, occasionally follow, and I have recently seen the statistics published by a German surgeon, who treated eleven cases of carbuncle by incision, six of these proving fatal by pyæmia. I have myself seen no death from carbuncle, nor do I recall any in the practice of other surgeons, unless in cases where there was some grave constitutional complication.

Carbuncle in one part of the body, the face, is considered particularly dangerous. It is said that but one case in nine gets well; but my own observation would lead me to think this an exaggerated estimate. This is a comparativly rare form of the disease, but I have seen two or three cases of facial carbuncle, all of which have ended favorably; it is true, however, that none of them were very severe. Death in facial carbuncle results from transference of the inflammation to the sinuses of the dura-mater, or from pyæmia. But in ordinary carbuncle, unless the patient has Bright's disease, or diabetes (an affection which predisposes to carbuncle), or unless the inflamed mass is so situated as to endanger internal organs,—peritonitis may follow abdominal carbuncle,—death will

seldom ensue, except as a result of injudicious treatment.

The old-fashioned treatment, which in my student-days we were taught should be used in every case, was to make an incision the entire length and depth of the carbuncle, this incision being crossed by another at right angles to it, and extending the entire breadth and depth. Had this mode of treatment been practised in the case before you, we should have had two incisions, one eleven inches long by three deep, and the other of the same depth and ten inches in length. You can see what an enormous wound would have been made, and how much blood would have necessarily been lost. Death even may occur from hemorrhage, for there is a recorded case in which a surgeon made the regulation incisions in the afternoon and directed the nurse to apply a poultice, saying that he would see the patient in the morning. Next morning he went to see his patient, and found that he had died from hemorrhage during the night. Then, besides this risk from bleeding, incisions increase the risk of absorption of poisonous matter, as they leave a very large raw surface. Another, though less serious, objection is that the resulting wound is a very large one, and that the time required for healing is correspondingly prolonged. In order to avoid hemorrhage, some surgeons practice subcutaneous incision; but this is an uncertain operation and presents no particular advantage.

Of course, the treatment by incision has something to be said in its favor. No course of treatment could have been in general use for so many years without being of some value. It somewhat diminishes the pain of the carbuncle, and sometimes seems to prevent its spread, but it is not always certain even that it will do this. The disadvantages of incision I consider much greater than its advantages.

There is another mode of treatment which is adopted either by itself or in connection with incision,—the use of caustics. They are either employed to cause central sloughing, or are applied as "caustic arrows," like the spokes of a wheel. The use of caustics in this way was introduced by Maisonneuve for the removal of tumors, and Sir James Simpson recommended the injection of caustic solutions in a similar radiating manner. I can remember quite distinctly the case of an old man with carbuncle who was a patient in the Pennsylvania Hospital when I was a resident physician there. The usual crucial incisions had been made, causing great pain and free bleeding, and it was my duty every day to cauterize the wound with the solid stick of nitrate of silver; and I can remember how that old man used to fairly shiver with the pain at every dressing. He got well at last, but it was after many weeks of needless suffering.

The first case in which I used the pressure treatment, which I now invariably employ, was that of an old woman at the Episcopal Hospital, who had a large carbuncle, and who was so old and feeble that I thought it would be really dangerous to make incisions. Mr. O'Ferrall, an Irish surgeon, was the first to recommend this mode of treatment: he applied compression by means of a plaster made to cover the whole mass of the carbuncle, and when suppuration began he cut a central opening for the escape of pus. I have preferred to use adhesive strips laid on concentrically, just as we use them in the treatment of swelled testicle.

We begin to apply the strips at the margin, and gradually bring them more and more inward, leaving a space at the centre to allow the slough to come out. We began treatment in this case last Wednesday week: up to that time the carbuncle had been constantly increasing, but since then the progress, fortunately, has been the other way. The pain was immediately much relieved, so that the patient has now only an occasional darting pain, but nothing really to give him distress. The carbuncle is smaller, and is getting flatter. It now measures eight by seven and a half inches, and is not more than two and a half inches deep. The patient has not lost a drachm of blood since he came into the hospital. You can see that the pus and sloughs of cellular tissue are slowly discharging themselves, and there is so far no sign of any additional opening. We have every reason for thinking that this patient will convalesce without any further trouble. Over the centre of the carbuncle we are using a small poultice, which we will change after a time for a dressing of resin cerate or zinc ointment, as may seem desirable.

There is another mode of treatment of which I have heard, but which I am happy to say I have never seen practised. Some surgeons have been so heroic as to excise the whole mass of the carbuncle; some surgeons, too, have excised gummatous tumors. The first can be made to disappear by simple compression, and the second will be absorbed under the use of iodide of potassium. To excise the one is as unjustifiable and as unnecessary as to excise the other.

In this case, on account of the mode of treatment which we have adopted, the ulcer left after the separation of the sloughs will be small, and the cure will be much more rapid than it would be if we had made incisions. I do not know of any instance in which the dicta of "authority" have come down to us with more injury than in the treatment of carbuncle by incision.—*Philadelphia Medical Times.*

A CASE OF TRUE CROUP TREATED BY LARGE DOSES OF MERCURY.

By O. T. Schultz, M.D.

The systematic use of mercury in pseudo-membranous inflammation of the upper air-passages—diphtheria and true croup—dates back to the eighteenth century, and seems to have originated

with American practitioners. I am not able to state in what particular manner mercury was first used by the originators of the treatment, what results they attained, and what evil effects, if any, accompanied its methodical employment. The practice seems to have extended rapidly, as every method of treatment for which good results are claimed in severe affections has always done, and very soon we find the leading clinicians of America, England, Germany, and France lauding it highly.

Two methods of using mercury seem to have been in vogue up to the middle of the present century. In the first it was employed early in the disease, either in small, oft-repeated doses, or in a few large doses, in conjunction with mercurial inunction. In the second it was given later in the disease when either its severity had been broken by antimonials, or after all other means had failed. None, however, of the many and illustrious practitioners who recommended mercury in pseudo-membranous inflammation of the upper respiratory tract had pinned their faith solely to either method, but, regarding mercury simply as an efficient auxiliary, had used it in conjunction with such other means as were in vogue at the time; that is, they had bled and blistered and cauterized and vomited and steamed and cut until their patients were no more, much in the same fashion as patients of the present day do under our own blind though well-meaning hands.

A reaction now set in against the mercury treatment, and authors became either silent or expressed their doubts of the usefulness of mercury in true croup and diphtheria, or positively warned against its employment, deprecating with Steiner the exhaustion accompanying the continued use of the drug, or maintaining with Mackenzie "that experience has long since taught us that the general influence of mercury on the system rather promotes than checks the spread of the exudation."

Still, even during this period of reaction against mercury, many men of large experience had stood up for the beneficial results to be derived from its use, restricting it, however, like Jacobi, to sthenic cases, with a fibrinous deposit, in which the disease remains local, and does not give rise to constitutional symptoms, and absolutely condemning its use in æsthenic cases that tend to assume the septic or gangrenous form. These upholders of mercury recommended the administration of *fractional* doses of calomel, often repeated, according to the plan of Albeos (one-fourth to one-half grain every hour until twenty to thirty grains have been given), the practice of exhibiting *large* doses having fallen entirely into disuse.

Within the last five or six years the mercurial method has entered upon another phase—that of a specific for the germs claimed to lie at the bottom of the pseudo-membranous process—and current literature is replete with reports of cures obtained by the cyanide, the red or yellow iodide, the bichloride, and the mild chloride of mercury. And since within the last year or two the king of germ-destroyers has again been found, and found in *mercury*, we will soon have drifted out of carbolomania into a furor hydrargyricus, and we may soon expect to see the specificity of mercury in this form of inflammation proclaimed as an axiom in therapeutics *ex omnibus cathedris*.

But while the great bulk of practitioners employing mercury in this affection at the present time are doing so on account of its germicidal properties, a very zealous and enthusiastic apostle of the practice has arisen in the person of Dr. W. C. Reiter, a physician of high standing in Pittsburgh, Pennsylvania, who attempts to explain the brilliant results he has attained in quite a different manner. Dr. Reiter also believes in the specificity of mercury in pseudo-membranous inflammation of the upper air-passages; but while the believer in germs attributes the disease to a *contagium virum*, for the destruction of which mercury is the specific, Dr. Reiter holds that this inflammation is due to "too much fibrine in the blood," which condition is produced by the liver having lost its fibrine-destroying power, and that mercury is the specific for compelling the liver to resume its function. Be his theory right or wrong, Dr. Reiter has put it into practice with great boldness, and with astonishing results. And he anchors his faith fully and squarely upon mercury in all forms of pseudo-membranous inflammation—fibrinous, septic, gangrenous and sthenic—without ever engaging in those delicate subterfuges, steaming, burning, or cutting. His results are reported to be marvellous, and unattended with any unpleasant after-effects, while the boldness with which he pushes mercury makes one's hair stand on end. He administers, after an initiatory dose of twenty grains of calomel, ten grains of this mercurial every hour, with potass. chlorat., five grains, every three hours, for twenty-four or forty hours, or until improvement sets in, and then continues it in smaller doses at longer intervals until the disease is cured. Reiter and his followers think nothing of giving half an ounce, an ounce, or more of calomel to cases of diphtheria or croup, and claim to have witnessed no bad effects, but to have cured the most desperate cases!

NITROGLYCERINE AND THE CHLORIDE OF GOLD AND SODIUM IN THE TREATMENT OF ALBUMINURIA.

By Dr. Roberts Bartholow *(Md. Med. Jour.)*—Chloride of gold and sodium have long been known to have a special direction to the genito-urinary apparatus. The ovarian and uterine organs in the female, the testes and vesiculæ seminales in the male, are stimulated by it, and the kidneys, by means of which it is eliminated, and in which it tends to accumulate, are decidedly affected by it in

function and structure. In common with some other agents of the class to which the gold belongs —for example, corrosive sublimate—the chloride acts on connective tissue and checks its over-production, or its hyperplasia. It would be quite impossible in this note to go over the evidence on these points, and hence I must ask your assent to these statements. They have been accepted as true of gold, from the days of the alchemists, and iatro-chemists, as any one may ascertain from that curious collection of mediæval medical learning—the Anatomy of Melancholy. It has happened, strangely enough, that Hahnemann and his followers have profited by this knowledge, and have used gold preparations—especially *aurum potabile* —in the treatment of renal diseases, with success.

How and when are these remedies to be used? Nitroglycerine is now administered, as all present know, in the form of the centesimal solution —1 minim of the pure drug to 100 minims of alcohol. The initial dose of this one per cent. solution is one minim, which should be increased until the very characteristic physiological effects are produced. The susceptibility to the action of nitroglycerine varies greatly, and hence the dose cannot be stated in advance. It is necessary to produce some obvious effect. To maintain the same level of action, a slight increase in the dose may be required from time to time. As the effect is not lasting, the interval between the doses should not exceed three or four hours.

The administration of nitroglycerine should begin in acute cases immediately after the subsidence of acute symptoms. It is indicated in chronic cases at all periods, but is more especially useful, if given before hypertrophy of the muscular layer of the arterioles has taken place. When it acts favorably, the amount of albumen in the urine steadily diminishes. The mechanism of its action consists in the lowering of the pressure in the renal vessels. How far any curative effect proceeds from action of this remedy on the sympathetic system, remains to be determined.

Chloride of gold and sodium is indicated in the subacute and chronic cases, especially the latter. The earlier it is given the better, if structural changes are to be prevented or arrested. The good effects to be expected from it will depend necessarily on the extent of the damage already inflicted on the kidneys.

The usual dose is $\frac{1}{20}$ grain, twice a day, but this may be much increased if necessary. At the outset, $\frac{1}{10}$ grain may be given; in a week the dose should be lowered to $\frac{1}{15}$ grain, and after a month the regular dose of $\frac{1}{10}$ grain should be steadily pursued, with occasional intermissions. Indigestion, gastralgia and colic pains, nausea or diarrhœa, are occasionally caused by it; and, if so, the quantity administered must be reduced. It is usually borne without any discomfort; but, after prolonged administration, salivation, weakness, emaciation, trembling and other nervous phenomena may occur possibly. Such effects, however, are wanting in my experience.

The treatment of albuminuria by nitroglycerine and the chloride of gold and sodium does not necessitate the exclusion of other means—hygienic climatic, or dietetic. These remedies should, however, be given uncombined, at different hours, and their action should not be hindered or obscured by the effects of other agents given with like purpose. To this general statement there may be two exceptions: with nitroglycerine, amyl nitrite or sodium nitrite may be given; with the gold and sodium chloride, corrosive sublimate may be combined. If doubts may be felt in regard to the propriety of depending on the utility of these remedies, they need not be long experienced, for, if no good effects are observed in two weeks, they may then be discontinued.—*American Med. Digest.*

LESSONS FROM THE OBSTETRICAL DEPARTMENT OF THE PHILADELPHIA HOSPITAL.

Dr. Theophilus Parvin in the report of his quarter's service (read before the Philadelphia County Medical Society), details well some important observations, and supplements the same with useful deductions. The following three facts induce him to discuss at length the third stage of labor:

One of the colored women failing to expel the placenta within an hour after the birth of her child, the gentleman having charge of the case introduced his hand into the uterus and removed the after-birth by piecemeal, or at least the greater portion of it. That patient had septicemia, and infected each of her neighbors; the colored obstetric ward at this time was terribly crowded, the beds so close together that a patient could almost roll from her own bed into the next one.

Shortly after this I was called to a woman in one of the white obstetric wards, who had been delivered of her child three hours before, but the placenta was retained. The paitent's pulse was good; there was no hemorrhage, nothing but the simple fact of delay in the third stage of labor. A little friction of the uterus, and compression of its fundus through the abdominal wall, caused the expulsion of the placenta in a few minutes. There was no fragment of the after-birth or of the membranes retained; the genital organs of the patient were not touched either by the interne or by myself in this delivery, nevertheless she had septicemia. Finally, a third patient had the placenta retained for nearly five hours, and then it was expelled. She had septicemia. These three patients recovered.

Dr. P. then discusses at length the doctrine of retained placenta as practised by various obstetricians, and expresses his own opinion as follows:

As long as the placenta is wholly attached, hemorrhage is impossible; the placenta is still a living structure, and one with the uterus; to tear it loose, to directly detach it from the uterus, opens the way for perilous hemorrhage. Not only this,

but such artificial detachment is usually incomplete, is liable to injure the uterine tissue, and the operator's hand may be the bearer of septic germs, or these may pass in with the air admitted during the manipulation, and find a congenial soil for their development in fragments of placenta, or blood-clots that are retained in the uterus. Therefore, unless hemorrhage demands immediate interference, the obstetrician refrains from passing his hand into the uterine cavity for the removal of an attached placenta; a completely adherent placenta is not so dangerous as the intra-uterine use of the hand for its detachment. I believe, then, that armed expectation is wise in the latter case, only endeavoring, by suitable compression of the uterus with the hand actually through the abdominal wall, to determine or assist that retraction of the organ which is nature's method of separating the placenta. After the detachment of the placenta—a fact which is best learned by feeling part of the organ with the finger passed into the mouth of the womb—we may, by friction and compression of the uterus, if needed, evoke uterine contractions which will cause its expulsion. Those who believe that the placenta presents its fœtal surface at the os uteri, urge the value of moderate and continuous traction upon the cord, thus assisting the moulding of the mass to the orifice through which it is to come. This conservative view as to the management of so-called retained placenta has been strongly presented by Siredey in his recent work upon puerperal diseases. The common expression, retention of the placenta, means very different conditions, each requiring its appropriate treatment.

Dr. Parvin's report contains another important lesson on septicæmia and its temperature and the difficulty of diagnosing a case of septicæmia from malarial infection, and concludes with a brief study of a ruptured uterus.

The uterus was ruptured in consequence of a shoulder presentation, a case which ended in death the eighth day after delivery, Yet I would fail in duty to my profession that has been so good, so generous to me, if I did not make the case fully known. The patient was a well-formed healthy multipara; she had been in labor nearly twelve hours when I first saw her, the left shoulder presenting. Ether was immediately given until she was thoroughly under its anesthetic effect; and then, without violence, nay, with great ease, I passed two fingers behind the right knee, brought the foot down, and turning and delivery were effected in a few minutes; the placenta followed almost immediately; the child, quite a large one, was dead. The patient came out from the anesthesia satisfactorily; her pulse was good; there was no complaint, no shock, no great hemorrhage. Yet that woman had a ruptured womb, the tear beginning at the os uteri on the right side, involving the cervix and the lower part of the body of the uterus, this condition being made known by the post-mortem. If it be thought I ought to have known this accident at the time of delivery, I can only say that like ignorance happened to Dubois, to Hervieux, to Tarnier, and others—the first revelation of the uterine rent being made at the post-mortem; these silent tears of the womb are, as Hervieux has suggested, probably more frequent than generally thought. No, my self-reproach is not in this, but in not having made myself, or by another, an examination during pregnancy, so that the abnormal presentation could have been corrected, if not then, at least early in labor. But let this pass. The great practical lesson to be drawn from the accident is not only the importance of an early rectification of a malpresentation, but also an appreciation of the danger of rupture of the uterus and how this accident occurs. The drawing now shown gives the position occupied by the child, and also and especially gives the change in form and thickness of the two cavities of the uterus, which, as so admirably described by Bandl, are formed when nature is unable to overcome the obstacle to labor found in such case. The one cavity is formed by the body of the uterus, and its walls become thicker and stronger; the other, by the cervix, and its walls grow thinner—become indeed so attenuated and weak that a very slight additional strain at some point; that strain may come from a uterine contraction, or solely from the introduction of the finger; and thus peril from action, peril from delay must be before the obstetrician's mind when called to a case of neglected shoulder presentation.

Of course had I seen this patient an hour or two earlier, the event might have been different. The pressure of the presenting part had been so severe that a slough of the vesico-vaginal wall occured, and the patient, had she had recovered, would have required an operation for the resulting urinary fistula; I have thought that possibly the uterine rent was in part the result of a slough also; but be this as it may, there was not the slightest indication given at the post-mortem that any hemorrhage in the abdominal cavity had taken place.—*Chicago Medical Press.*

TREATMENT OF ECZEMA OF THE GENITALIA; AND LEUCORRHEA.

In cases of eczema, in which glyceroles and unguents have failed, the following formula has been successful:

Chlorate of potassium.....30 grains;
Wine of opium.....50 grains;
Pure water..... 1 quart.

Applied to the parts by linen compresses covered with oiled silk. If there is much inflammation, precede this with warm hip-baths and cataplasms sprinkled with powdered carbonate of lime. In obstinate pruritus, associated with leucorrhea, a tablespoonful of a mixture of equal parts of tincture of iodine and iodide of potassium; in a quart of warm tar-water (tar-water holding the iodine in

solution), used daily, night and morning, removes the pruritus and ameliorates the leucorrhea. In fetid leucorrhea, two or three tablespoonfuls (in a quart of warm water, morning and evening, as an injection) of the following formula will be found useful :

Chlorate of potassium,.....13 parts ;
Wine of opium .....10 parts ;
Tar-water,.....300 parts.

Or,

White vinegar (or wine).....300 parts ;
Tinct. eucalyptus,..... 45 parts ;
Acid. salicilic,..... 1 part ;
Salicylate of Sodium,..... 20 parts.

One to five teaspoonfuls in a quart of warm water, as an injection, two or three times a day.—*Obstetric Gazette.*

TINCTURE OF GUAIAC IN ACUTE SORE THROAT.

Various medical authorities have borne more or less emphatic testimony to the value of tincture of guaiac in sore throat.

Stillé, in his *Materia Medica* says, "Guaiac has been recommended in tonsillitis by Dr. Hanney of Glasgow, Mr. Bell, Dr. Carson, and Mr. Carter. According to their statements, it abates pain and inflammation with singular rapidity and uniformity. He does not seem to have had any personal experience with the drug in this disease.

In his *Practice of Medicine* Dr. Fred. T. Roberts states that guaiacum has been supposed to exert a special influence upon the disease in question.

Phillips, in his *Materia Medica and Therapeutics* indorses the use of the drug in the following terms : "Recent clinical experience has shown that guaiac is a capital remedy in tonsillitis. Given in half-drachm doses (tincture) every four hours, it appears to abate the inflammation, and to cut short the disease in a remarkable manner."

Mackenzie, in his work on *Diseases of the Throat*, says, "In cases of deep tonsillitis..... fortunately there is a remedy, which, if administered at the onset of the attack, will almost always cut short the crescent inflammation. This is guaiacum."

Dr. J. B. Potsdamer, in a paper read before the Philadelphia Laryngological Society, and printed in the *Medical and Surgical Reporter*, after referring to the above and other authorities, remarks :

I was first led to use this treatment in the winter of 1879, and then only after a succession of trials upon myself. During that winter I was subject to attacks of sore throat. The first, which occurred in November of that year, was quite severe, and was entirely cured in two days. About six weeks later, after exposure to wet and cold, was threatened with another attack, having sharp pains in the region of the tonsils, and difficulty in swallowing. The parts were highly congested. This attack was aborted by the prompt use of the ammoniated tincture of guaiac in half-drachm doses every three hours. Was well in twenty-four hours. Two subsequent attacks were aborted in like manner. Since then have not had a recurrence.

A detailed report is added of a number of cases which show the efficacy of guaiacum, not only in ameliorating the symptoms, but also in cutting short the disease.

SORE THROAT IN CHILDREN.

Henry Ashby, M D., M.R.C.P., (*Practitioner, London*, Dec.,) mentions four principal varieties :

1. Simple tonsillitis. 2. Scarlatinal tonsillitis. 3. Pseudo-diptheritic. 4. Diphtheria.

Weakly and scrofulous children are especially subject to the first. It is oftener seen as a complication of alimentary disorders, as those of liver and stomach, than of the respiratory tract, as bronchitis and laryngitis. It frequently precedes rheumatic attacks. It may be the result of the scarlatinal poison. In proof of this, he cites an interesting series of eight cases occuring in a hospital ward within a few days. Several nurses also took the disease. The first patient attacked, it was found, had been exposed to genuine scarlatina a few days before. None of the cases had an eruption. One a patient in previously bad condition, died. No insanitary conditions prevailed.

In view of the difficulty—at times the impossibility—of diagnosticating scarlet fever from simple tonsillitis, the writer recommends the isolation of all children with febrile sore throat as long as faucial congestion remains. The points in favor of scarlatina are : the presence of vomiting and diarrhœa in the stage of invasion ; a pulse of 130-160 ; not necessarily a high temperature ; marked injection of the uvula pillars of the fauces and tonsils, Later the enlargement of the cervical lymphatics with tenderness ; the implication of the nasal mucous membrane, and a yellow exudation over the tonsils and uvula, make the diagnosis of scarlatina tolerably certain.

Under pseudo-diphtheria the writer includes a class of cases which are said to bear the same relation to diphtheria that .epidemic tonsillitis bears to scarlatina. It prevails where diphtheria does, is attributed to sewer-gas and other poison. They differ from it in that the cervical glands are rarely involved, the membrane is less tough, the nasal mucous membrane unaffected, the urine does not contain albumen. the usual sequelæ of diphtheria are absent. The prognosis is always good. The duration is rarely over a week.

The sore throat of diphtheria is differentiated from anginose scarlatina, by the fact that in the latter we rarely have true membrane. A yellowish exudation may cover the tonsils, perforation and even sloughing of the palate may occur, and there may be much external cellulitis, but the leathery, whitish, adherent exudation of diphtheria is absent. The amount of albumen in the urine of scarlet fever is usually slight; in diphtheria it is often fifty per cent.—*Archives of Pediatrics.*

TO ABORT A STYE.

Dr. Fitzpatrick, in the *Lancet*, says he has never seen a single instance in which the stye continued to develop after the following treatment had been used: The lids should be held apart by the thumb and index finger, while the tincture of iodine is painted over the inflamed papilla. The lids should not be allowed to come in contact until the part touched is dry. A few such applications in the twenty-four hours are sufficient.

THE TREATMENT OF PELVIC CELLULITIS FOLLOWING PARTURITION.

Dr. W. M. Graily Hewitt thus concludes an article in the *Medical Press*, November 21, 1883:

A few words with respect to the treatment: A remarkable feature in these cases is their tendency to chronicity. They are always tedious and difficult to cure, and the cure depends more on attention to diet than on any other element of the treatment. Rest, of course, is an essential; but the nutrition requires careful consideration. With regard to the subject of food: Deficiency of food may predispose to cellulitis in a patient in whom other factors in its cause may be present: or it may render an already existing case of cellulitis less amenable to treatment. In the case before us the quantity of food taken was perhaps only one-third of the total amount required by the healthy subject. This created a weakness which showed itself in various ways. Under these circumstances there is a great indisposition to take food, and if only three stated meals a day are provided, a very small amount is taken; the patient becomes exhausted in the intervals, and when meal-time comes is not able to take nourishment. Hence the quantity taken is not enough to induce activity in the nutrition process, but only enough to keep up a condition of *statu quo*. To stimulate nutrition, articles capable of ready assimilation must be selected—Brand's essence, beef tea, milk, etc., with a fair amount of stimulant in the shape of brandy, and this must be given very frequently, every hour or so. Under this treatment the appetite will rapidly improve, and in a week or so, in all probability, solid food will be taken with zest.

As subsidiary treatment, poultices may be applied to the abdomen to relieve pain and assist resolution, and if the latter is very severe a little opium is indicated. The bowels should be daily opened by the administration of a mild laxative. Some medicine, in the shape of dilute nitro-muriatic acid, with a little tincture of orange, is often useful as a stomachic and tonic; and later on iron and quinine may be given with advantage.—*Med. and Surg. Jour.*

IODOFORM SUPPOSITORIES FOR PILES.

The following recipe for suppositories for hemorrhoids is from the *Zeitschrift fur Therapie:*

℞ Iodoform		4 parts
Balsam Peru		8 "
Cacao butter, White wax	of each	6 "
Calcined magnesia		4 "

Mix. To make twelve suppositories. One to be introduced after stool each time.—*Druggists Circular.*

TREATMENT OF URTICARIA.

Dr. McCall Anderson publishes a lecture on this subject *(Br. Med. Journ.)*, from which we deduce the following on treatment: First, find out and remove the cause. In acute cases a sharp purge is useful, especially if there be indigestion. If indigestible food is still in the stomach give an emetic. Avoid stimulating diet. In chronic cases by varying the diet we may trace the offending article of food—malt liquor, spirit, white wine, vinegar, fruit, sugar, fish, vegetables, etc. In some cases complete change in diet is not of the slightest avail. When no cause is apparent, or the disease continuing after its removal, we must treat empirically. Most is, perhaps, to be expected here from atropia ($\frac{1}{100}$ grain subcutaneously at night or night and morning), and bromide of potash (gr. x three times a day). Continue till physiological effects are apparent. Occasionally a continuous current twice a day is useful, the positive pole being placed at the top, the negative at the bottom of the spine. We may also try sulphuric ether, 20–40 drop doses, or quinine in full doses, or arsenic. Complete change of air, scene and occupation, may become necessary, and a visit to Vichy is sometimes advantageous. Relief is obtained by sponging with vinegar and water, Cologne, or ℞. Acidi carbolici cyst. ℥ ij; glycerini (Price) ℥ vj; eau be Cologne ℥ j; aquæ destillatæ ʒ iv, or ℞, Chloralis hydratis, camphoræ aa ʒ ss; misce et adde glycerini (Qrice) ℥ j, unguenti simplicis ad ℥ j, or tarry preparations, as a lotion of equal parts of tar, soft soap and rectified spirit; the last may exceptionally yield permanent benefit.

THE CANADA MEDICAL RECORD

A Monthly Journal of Medicine and Surgery.

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SUBSCRIPTION TWO DOLLARS PER ANNUM.

All communications and Exchanges must be addressed to the Editors, Drawer 356, Post Office, Montreal.

MONTREAL, JUNE, 1884.

TO OUR READERS.

We have to apoligize to our readers for our very tardy appearance of late. The chief cause of this has been the removal of our printers into a building in rear of the one they previously occupied. The old one is being torn down and will be replaced at once by a large and beautiful building which our publishers hope to enter by the end of the year. We will soon make up leeway, and hope to be more regular in future.

The Committee to select a site for an Asylum for the Protestant Insane have been running round the Province in search of a location.

It is a question whether they know *what* they want, as grounds varying in size from a 15-acre lot upward have been inspected.

To our mind their duty is clear: Estimate the probable number of male inmates, look to the probable increase in the future, and at least an acre for each male patient must be the minimum quantity of land secured. It is wasting time to travel about the country looking at locations that cannot begin to give this *necessity*. Moreover it opens up the question whether the committee is fit for its duty.

At the quarterly meeting of the Governors of the Montreal General Hospital, to be held on the 13th of August, the proposed change in the by-laws, viz: to name a Gynecologist and a Laryngologist to the Institution, will come up for ratification. Although, from what we hear, there may be some objection to the by-law, yet it will beyond doubt be carried.

It is a question whether, when the by-law has been passed, it will be wise to proceed, after ten days, as we believe may be done, to make the appointments.

Who will receive these appointments is of course a foregone conclusion. Two gentlemen on the out-door staff will be thus promoted. Their election will not cause competition, but for the two vacancies thus to be created, there are several candidates. If the election takes place, as permitted by law, it may place some of these gentlemen at a great disadvantage. Many of the Governors of the Hospital will at that time be out of the city, while many others will be deeply engaged in preparing for the meeting of the British Association for the Advancement of Science.

There is no reasonable excuse for hurrying these appointments. The November meeting of the Governors will soon come round. Then our city will have recovered from the excitement of the great scientific meeting, and those in whose hands these appointments lie will have time to consider the claims of the various candidates. We have heard this view expressed by many interested in the Hospital, and we trust that those who have been the prime movers in suggesting these additions to the staff, will show their good sense by not pressing an immediate election.

While upon the subject of the Montreal General Hospital it may not be amiss to say that those who for years have been able to carry their nominee at all elections, at this moment occupy a very delicate position. The last election developed an opposition which they little thought to exist in the strength which it then exhibited. That opposition is a powerful and a wealthy one; it has contributed handsomely to the support of the Hospital in the past. If it is to continue to do so in the future will largely depend upon the action of the party hitherto in power. Financially the Hospital is in a critical position; it needs the support of ALL. If they act wisely this support can be assured. If they

act so as to show a determined hostility to this large body of Governors, much of this support will be withdrawn. We know that our assertion is true; we point to the subscription list of the Hospital for the last year, to show that this withdrawal of support has *already* commenced. Unless wise counsel prevail this will continue and largely increase. The Hospital cannot afford to allow the private interests of a few to alienate from it any large amount of public support. Let the medical men who have wielded this power learn the lesson in time.

This warning is necessary. Although not generally known, an attempt has been made by a portion of the Medical Staff of the Hospital, to so arrange the vacancies which will be created by the appointment of a Gynecologist and a Laryngologist, as to operate against one of the candidates for these vacancies. This was attempted in this wise. It having been decided that the out-door staff should, like the in-door staff, be divided into a medical and a surgical staff, a division was made, placing the two gentlemen who are about to leave it to become specialists—on the surgical staff. This would make two surgical vacancies. One of the candidates, whose entrance to the Hospital is opposed by the medical clique in power, is better known as a physician than as a surgeon, although like the *entire* medical profession in Montreal (except two oculists) he is a general practitioner. This fact was made to do duty against him a year ago, and in the manner indicated preparation was attempted to be made, for its doing duty again. By the determined action of two members of the Medical Board, the attempt was frustrated. The division was postponed, and now practically these two men hold the game in their hands. Nevertheless the animus was shown.

Is it not time that a truce was called between the two parties, and an arrangement come to whereby the two vacancies shall be filled by a candidate from each being elected. Such it seems to us should be done. Each should then be satisfied, the hospital would be the gainer, and a calamity which now threatens the institution be averted.

Then again it is a question worthy of consideration whether it would not be wise to increase the staff. There is plenty of material to give work for at least four more men. That such an increase would be highly advantageous does not, we believe, admit of a doubt. One has only to visit the wards during the session of our medical school, to be convinced of this. The crowd of students that follow the present staff is absurdly large, both as regards benefit to the students and the welfare of the patient. This fact is recognised by the students themselves, and is a loud cause of complaint among them—moreover it drives students from the city. We know this to be a fact. Montreal should be the chief centre of medical education in the Dominion. It was at one time. We doubt much if it is now. The oldest medical school in Montreal had, one year ago, only increased about eleven students in nineteen years. And this notwithstanding the fact that many students have come to Montreal from the Maritime Provinces since Confederation, who previously went to the States for their education. In Toronto, during the same ime, one of its medical schools has increased from about seventy to nearly three hundred students. All this increase is of course not due to the cause we complain of, but some of it is. The staff of the Toronto General Hospital is arranged so as to suit nearly all. It is useless for us to praise our method of clinical instruction. We know it to be good. We would not wish for better men. But to have to stand on the top of a bed, climb a chair, or force through a dense crowd of fellow-students to get a glimpse of a patient, will sooner or later drive students from us. Nay it is doing so every year. We believe the policy which perpetuates this to be foolish in the extreme. It is suicidal to the interests of Montreal as a medical teaching centre. It is against the interest of the medical school which, having the present medical control of the hospital, fears the admission of the member of another school. In many other cities the members of different schools are attached to the same hospital and they work harmoniously together. We do so here in private practice—why it cannot be done in hospital work we fail to see.

It can be done. Thirteen years ago, when a new English medical school was started in Montreal, and its students began attendance at this hospital and applied for admission to its clinical lectures, it was said there would be disagreement with the students of the senior school. We have

yet to hear of the first difficulty. The lesson of the students might with profit be studied by some of the professors.

And why this persistent opposition from a certain quarter to the men of this junior school. Is it not a fact that two of the now leading men of the senior school, thirty years ago, were the organizers of a rival to their *Alma Mater*. That it only existed one year was not their fault. If any *animus* existed, it was in the formation. That it was not necessary, or that its promoters did not realize the position it would of necessity occupy, is proved by its early demise. That this junior English school in Montreal is now entering on its fourteenth session, proves that at least its promoters knew what they were doing. Having existed that long—having battled quietly and honorably for its rights, with at least the approval of a large body of the pubic, both professional and lay, it is not likely now to succumb. Its power in hospital matters is year by year growing stronger. The time will come, and perhaps soon, when its star may at least equal that of its rival. If we know its men, it will then only ask for, as it does now, equal justice. Are the men of its rival willing to give it? It is for them to say.

LACTOPEPTINE.

This well-known remedy is constantly gaining in favor with the profession in treatment of bowel complaints in children, especially in cholera infantum. Our own experience in its use in the latter affection, leads us to bring it again under the notice of the profession at this season of the year. It may be combined with bismuth, calomel, ipecac, or any other agent that may be indicated. It aids digestion, controls the action of the bowels, modifies the secretions promptly, and produces no disagreeable after effects.

THE LATE DR. LANDRY.

Dr. J. E. Landry, died in Quebec on the 10th of June. He was a prominent medical man in that city, but for many years has devoted himself to his interest in the Beauport Asylum, of which he was one of the proprietors. He left a considerable fortune.

THE CANADA MEDICAL ASSOCIATION.

The annual meeting of the Dominion Association will take place in Montreal on the 25th, 26th and 27th of August, and a large gathering is expected. The attendance of at least thirty or forty prominent English medical men, who come to Canada to be present at the meeting of the British Association for the Advancement of Science, is already assured. Among them is Mr. Lawson Tait, who has promised an address on Abdominal Surgery. The committee of arrangements in Montreal have been at work for some time, and we can assure those who may come of a hospitable and pleasant meeting. Gentlemen who propose to read papers should at once notify the acting secretary, Dr. James Bell, Montreal.

Local and General.

In the absence of excursions into the country and to the seaside, the means by which our neighbors across the line fight off the effect of the summer heat from the children of the poor, it seems to us that a temporary children's Hospital or Sanitarium might be established on Nun's Island or in some other convenient locality. So far we have had a cool summer, and comparatively little cholera infantum and other diarrhœal complaints, but the general practitoners know how many children die in Montreal every summer for the want of a few weeks of pure and fresh air, and a rational diet. Even if no more than half a dozen large tents or *marquées* could be obtained, it might save many lives. In urgent cases the mothers could accompany the children, and might be available in assisting to do the work about the encampment. It would also form a valuable convalescent hospital for city institutions.

Greig in his "Enigmas of Life" points out how nature (with a large N. P.) weeds out the weakly, and thediseased, by such means as this very infantile cholera, and discusses in a very interesting way how man has stepped in and modified the force and changed the direction in many instances of "Natural Selection." He seems to be undecided in his conclusion as to whether such interference is likely to be prejudicial to the race or otherwise. It appears to me that Nature (whether spelled with a large or a small N), is supremely indifferent to the fate of the indivi-

dual and affords us little comfort in the matter. Until further experience teaches us otherwise we are bound to go on, and not only secure the life, when we can, but also prolong the existence, if nothing more is possible, of the weakling, even if he, in the meantime, reproduces his kind and spreads abroad his doubtful influence.

Still, those of us who incline to the belief that it is better for the community that there should be a weeding out of the sickly may find good examples of the desired *end* even if we revolt at the means employed for its attainment. These might be styled cases of "artifical selection," and it reaches it highest state of perfection in old Laconia, where only sound, vigorous children were allowed to live. When a Spartan woman was found to be pregnant, they hung up pictures of the handsomest men about town in her bed-chamber so as to produce a favourable effect upon the fruit of her womb. It is upon this principle, we presume, that we so often find a more or less artistic representation of the three Graces in many modern rooms sacred to the goddess Lucina. I have not yet learned, however, whether that picture is intended to "impress" the expectant father or the mother.

If we really must have Asiatic cholera here next summer, or the following one, shall it find us prepared or unprepared? If the latter, will the consequent widows and orphans have a claim upon our city government? If a man trips over a deficient sidewalk or falls upon an icy pavement to the detriment of his long bones, he has good grounds for an action at law against the party whose duty it is to keep the pathways in proper order—why is it not then allowed to proceed against a corporation who wilfully and criminally poisons the people under its care by dirty lanes and deficient sewers, and by allowing them to live in reeking man-traps, facetiously termed tenement houses? As soon as the various officials and others connected with our local Health Office, get through squabbling among themselves, perhaps they will turn their gigantic intellects upon these questions, and consider them.

In Cable's "Dr. Sevier," the doctor is asked to subscribe towards an asylum overcrowded with orphans in consequence of a late epidemic of yellow fever, and while putting down his name for a large amount delivers himself thus: "In old times we used to go into monasteries, now we subscribe to orphan asylums. Nine months ago I warned this community that if it did not take the necessary precautions against the foul contagion that has since swept over us, it would pay for its wicked folly in the lives of thousands and the increase of fatherless and helpless children ——We deserved it!"

Then he reads the heading of the subscription list: "God in his mysterious providence—oh, sir!—what a foul, false charge! There's nothing mysterious about it! We've trampled the book of Nature's laws in the mire of our streets, and dragged her penalties down upon our heads!

A community has got to know these laws and keep them or take the consequences—and take them here and now, on this globe—*presently*."

Who has run away with the Protestant Insane Asylum? I wish somebody would clear out with the sectional differences that makes it impossible in this Province for Protestant and Catholic citizens to unite in supporting at least one good insane asylum near the city of Montreal. Let the local legislature give a *per capita* grant and the co-religionists of the patient make up the balance necessary for his proper treatment.

Looking at the Longue Pointe Asylum one is impelled to wish for a little less religion and a little more medical science in its internal economy.

Just what religion has to do with an Insane Asylum would puzzle most theologians to declare. I have always myself been under the impression that the various churches preferred their adherents in the sane condition and did not hold them responsible (after the legal style) when *non compos mentis*.

Miss Jewett's "A Country Doctor" is quite worth reading. There are many passages in it which remind one—at a respectable distance however—of the musings about our profession which dot the pages of "Elsie Venner." I actually came across a doctor the other day, and he was no mean representative of our Art, who had never read the latter book. I begged him, in view of the

uncertainty of life, to read it at once and to read the medical portions at least three times.

Is the House Surgeon of the Children's Hospital, Hackney, London, the inventor of the rubber drainage tube commonly used in cases of empyemia.

In a recent paper read before the Ontario Medical Association, Dr. J. P. Brown seemed to make that claim for him. See *Canada Lancet* for July.

I give his exact words: "He (the House Surgeon),remarked that they always found difficulty in securing the tubes so as to avoid the possibility of accident; *and that he had devised a method which secured perfect safety*. He showed me the arrangement, and also two in actual use there. The end of the tube was split in quarter *segments* longittudinally. A circular rubber cap was then made with a hole in the centre large enough to admit the tube. The ends were passed through and by the application of heat welded on to the upper surface of the cap. The cap would thus effectually prevent the possibility of slipping in so much dreaded."

A few days ago I extracted a hair (*cilium?*) from the upper canaliculus of a patient's left eye. He thinks it must have found its way there *from some other eye* as it was of quite a different color from his own blepharides!

P. A. LAVER, M.D.,

Montreal July 16, 1884.

HYGIENIC FOODS.

The early practice of our oldest physicians, as well as the trade of many of our chemists a quarter of a century ago, prove that large quantities of "groats" and "prepared barley foods" were sanctioned and used by the profession. They were prescribed for children and invalids, and the results were most satisfactory. Of late years the use of these foods has materially declined, to the detriment of many whose diet should be almost restricted to fruit and cereals. A chief cause of the falling-off in the use of cereal foods has no doubt been the careless manner of their preparation, and we are glad to note that one firm at least has realized the importance of preparing the various grains so as to preserve all their valuable qualities, while presenting them in attractive form, and treated in the light of all the scientific progress of the time. We have been led to these observations through receipt of a circular from Messrs. Fish & Ireland, of Lachute Mills, P. Q., who offer us the following valuable bill of fare:

Dessicated Wheat, (Hulled and Rolled);

Rolled Oats, (Oat Meal);

Dessicated Barley, (Hulled and Rolled);

Dessicated Rye, (Hulled and Rolled);

Patent Prepared Pea-Flour, (for Soup, Brose, &c.);

Superior Family Groats, (Pure and Fresh);

Patent Prepared Barley, (Pure and Fresh)

Parched Corn, (Green Corn):

Whole Wheat Meal, (made of the whole kernel of wheat except the outer bran);

These foods afford not only nutritious and delicate diet but also assist in laying the foundation of a strong muscular development as well as brain and nervous vitality. They contain a full proportion of diastase and the nitrogenous constituents so essential to the health and vigorous growth of the body in the earlier stages of life, and for the reconstruction of systems 'run down' with dyspepsia and other affections of the digestive organs. We have tried several of the foods above mentioned, and have no hesitation in recommending all the preparations of this house as worthy the confidence and endorsement of our readers.

Dr. Irwine (M.D. McGill, 1866) is now on the "Circassian" of the Allan Line, as Surgeon. He was for a number of years in the African Court, being held in high repute there. He was Physician to the King.

PRACTICE FOR SALE.

A competent general practitioner can learn of an opportunity to purchase an active practice, averaging $3,000, located in a delightful region, famous as a resort for lung patients.

Good home and road outfit, with some furniture if desired. Reason: going to the city.

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VOL. XII. MONTREAL, JULY, 1884. No. 10

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Progress of Science.

CERTAIN MATTERS OF TREATMENT WHICH SHOULD BELONG TO THE LYING-IN ROOM.*

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The physician's office in the lying-in room is, in one respect, peculiar. It is the only time in his professional life that he is called upon to superintend, and perhaps aid, a purely physiological process.

In all his other duties he deals with disease, but in the care he gives the parturient woman he is at hand to avert possible danger or to aid incompetent nature. This being the case, his endeavor should be to leave his patient in as good condition as she was before the parturient act. But too often he is called to see a well woman, and when he discontinues his attendance he leaves a chronic invalid.

I purpose to speak of some matters of care, of both mother and child, which I think properly belong to the lying-in room. Attention to these would, I think, diminish invalidism in women whose health motherhood has imperilled, and in the infant avert dangers which threaten its welfare.

My paper, which does not claim to be exhaustive, will be on "Certain Matters of Treatment which should belong to the Lying-in Room." I propose to speak only of such troubles as may attend upon natural labor, but which may nevertheless, leave a woman with health impaired, and years of feebleness before her.

The first in the natural order, as being first in the order of time, is the immediate care of the perineum. It can be fairly stated that no woman is delivered of a normal child at term without some perineal tear. Be it even trifling in degree, it should be immediately closed by sutures. First to increase the patient's immediate comfort. The application of the sutures is but momentarily painful, and though their presence may be recognized, the movements of the patient's body give no more suffering, with the sutures in position, than when the torn surfaces lap one upon the other. At the end of a week the soreness is gone if union has taken place, while several weeks are required for the granulating surface to lose its tenderness and be shielded by mucous membrane.

Second, because the closed wound leaves one less avenue for septic entrance. If the wound heals by first intention the union is cemented in twenty-four hours, while the discharges seldom become poisonous before the second or third day.

These remarks apply specially to the slightest degrees of laceration, where the decision is between immediate attention and entire neglect. Where a greater injury has been inflicted it is better to close the perineum at once, because, besides the reasons already given in the lesser case, viz., the increase of the patient's comfort, and the lessened danger of septic absorption, a later operation will be required, and that is a matter of greater severity.

In these days, when operations are common, and every woman, or at least her bosom friend, has had special treatment, nothing is more common than for a woman to ask, at once, after delivery, if she be torn, and to express desire for immediate treatment. It is useless to attempt deceit, as it will be sure of detection and unnecessary, because, even popularly, no blame attaches to the accident. But, for that very condonation, blame does attach to neglect of such an injury after its occurrence. Results, too, are almost always favorable.

In my own practice an average of eight cases in ten have healed by first intention. A few times, from suspicion that a rise of temperature might be due to imprisoned pus, I have removed the stitches prematurely, but in no case has there been any untoward result. In some cases I have failed to operate and have regretted my neglect, but in no case where I have operated have I wished that I had pursued the other course.

* Read before the Practitioner's Society of New York.

It seems strange that any other habit than that of immediate closure of the wound should have obtained. In no other situation has it been the habit to prefer a healing by granulation to union by first intention. If a nostril were torn, the mouth gashed to double its size, the first effort has always been to bring the parts in close apposition and retain by sutures. But many a woman, nearly torn in two, has been allowed to suffer the slow torture of a possible healing by granulation.

As to the means to be employed, if not in one's pocket-case, they are always at hand. A button-needle and embroidery silk, or dentist's floss, have in several instances stood me instead. The silk suture is preferable to silver wire. Its perfect softness and pliability prevent all the suffering which every contact with the twisted wire occasions. The union is as perfect with silk, and though there is likely to be a little suppuration in the track of the threads, the additional comfort that is gained in motion and dressing by using a pliable instead of a stiff suture is sufficient reason for employing the former.

The second matter—often neglected, but deserving of attention in the lying-in month—is the condition of the uterus as to its position. Every woman should be examined by digital touch three or four weeks after delivery, or when beginning to move about freely upon her feet. Any descent of the uterus, or a slight alteration of normal axis is easily appreciated, but what is of more importance is then easily rectified. A light uterine support worn at this time, for a brief space, will achieve what no pessary could at a later one. I make such an examination, and if I find prolapsus or retroversion in the first or second degrees, I do not trust to nature, but attempt her aid by causing a pessary to be worn till involution has lightened the uterus, and the uterine supports have gained their tonicity and their normal size. I feel as well assured as one can, that cases of threatened severity have thus been cured.

Several cases I have had that have been relieved of chronic retroversion by the use of a pessary during the period of involution.

In cases where the uterus lies lower than normal but is anteverted, less can and less needs be done. The axis is more nearly correct and attendant inconveniences are less, while nature, in this case, is more competent to remedy the fault. But here, also, slight support by preventing passive congestion of the displaced organ, will in a measure diminish the tendency to a hyperplasia, which might result.

The nurse will usually tell the patient that the "sense of falling" is perfectly natural, and that it will disappear as strength comes. But in many cases the symptom is an indication of a true uterine displacement, which a little care will remedy, but which neglect will aggravate. There is no time so favorable to treat the malpositions of the uterus as that following delivery. The womb, as well as its supports, are then undergoing active change, and with proper assistance can regain normal strength and tone. We look to the parturient act to remove the mechanical dysmenorrhœa of the nullipara, and we may look to it also as a means of improving many cases of displacement, and most cases of hyperplasia, unless a lack of careful management, during the precious weeks following delivery allow the troubles to aggravate.

The third matter I would specify, as usually neglected but deserving of care during the lying-in month, is the prepuce of the male child. Great attention has been called of late years to the influence of phymosis upon the child's nervous system and I have had many instances where improvement in general health, as well as in local nervous disturbances, has followed the removal of an adherent prepuce. So manifest has this been to the parents, that when a male child was subsequently born in a household where a child had been circumcised, the mother has always been eager that the same operation should be performed on the successor. The popular voice is in favor of the operation. It should be attended to in the lying-in room. It is a well-known saying among nurses, that boys are worse than girls, more restless and fretful. This I think is mainly due to preputial irritation. My attention was first specially called to this condition by two cases which were unable, or very insufficiently able, to empty the bladder. The release of the prepuce immediately relieved the symptom, and one boy, who for six days had wet only once in twenty-eight hours, urinated almost regularly every three or four hours. The other, with even severer symptoms, was at once benefited, and all disposition to retention was overcome.

Since these cases occurred I have examined the prepuce in every male infant, and have operated on all that seemed to demand interference. In the majority of cases at birth there is adhesion between the two mucous membranes, the orifice of the urethra and that of the foreskin not differing much in size. In cases where the preputial orifice allows I push it back, separating the two agglutinated surfaces with a probe. This can be done, I think, in one-fourth the cases. In three-fourths either very forcible stretching or a cutting operation is needful. Of those I much prefer the latter method of treatment. A linear incision slitting the prepuce on the median line is all that is needful, and there is no necessity of circumcision. The splitting up the prepuce is efficient, and equal in appearance. Besides, a demonstrable foreskin is left, which some prefer. In manhood this method results in deformity; in childhood the result is doubtful in this regard; in earliest infancy the result is perfect, provided after operation care is taken that the foreskin shall heal, leaving the glans constantly exposed. The chief reason why the less operation is equally efficient, and therefore should be performed in early infancy, is that the cuticular and mucous surfaces are then equal in development. As the child grows the mucous surface perhaps

by its adhesion, seems to develop less rapidly, all growth is apparently limited to the outer surface, which elongates in folding upon itself, so that it quite conceals the urethral orifice. The form known as "little boy's prepuce" begins development early, but if the operation is made in the first fortnight the incisions in skin and mucous membrane are almost equal in length. In two months' time the prepuce with its infolded skin will be nearly double the size of the mucous lining covering the glans.

As to the time of interference, unless there be retention of urine, as in the two cases I mentioned, I believe that the rule established by Jewish and Mohammedan usage is a good one. By that time all possible septic trouble from the cord is removed, and the mother is too far advanced in convalescence to be troubled by any possible shock to her nerves.

If the prepuce is slit back as far as the corona and the two mucous surfaces separated, there will be no after-trouble, and at three years, save that the glans is uncovered, there will be little sign of the surgical interference. My reasons for advocating this plan are these :

Sooner or later the boy or man will require some treatment similar to this, the splitting of the prepuce or its circumcision. If likely to be required, all things being equal, it had better be done early than late. It is better that the child's system should escape the long nervous strain that the constant preputial irritation gives. If done early the lesser operation gives equally good results, both as to efficiency and appearance.

The points I have endeavored to make are these :

First.—Examine every woman immediately after delivery, and if there is any laceration, even a trifling one, close at once with silk sutures.

Second.—Examine every woman when she begins to move about, and if there be displacement of any kind, anteversion, retroversion, or prolapsus, introduce a proper pessary, with the hope that its temporary use during the period of involution will establish a cure.

Third.—Examine at birth every male infant, and if the prepuce be so contracted or adherent that, with probe and pressure, the glans penis cannot be uncovered, operate by splitting the prepuce as far back as the corona with scissors or bistoury ; the chosen time for operation, unless urgent symptoms present themselves, being the ninth day.

TREATMENT OF PUERPERAL SEPTICÆMIA.

Let us now suppose that, in spite of every precaution, the specific poison has gained entrance at one of the numerous door-ways left open in the genital tract between the vulva and the fundus uteri ; what are the most reliable means now known to us for checking the advance of the septic disorders which are set up in consequence ?

But let me stop here, before answering the question just asked, and explain what I mean by the use of the term specific poison. I do not believe that there is, necessarily, any specific disease germ which gives rise to puerperal septicæmia. It is probably the same germ as that which is the source of septicæmia, phlebitis, lymphangitis in the stump after an amputation, in the wound created by a compound fracture, or in the lacerated tract produced by a gun-shot. But the pathological condition excited appears to me to be entirely different from that putrid absorption which results from the decomposition of a retained placenta, or a putrid mass of blood. Such decomposition produces a toxæmia,violent and dangerous it is true, but which disappears as soon as the offending mass is removed. That of the true puerperal disease at once, or almost at once,diseases the lymphatics and sets up an action which often proves uncontrollable. If the mere presence of decaying animal material in a uterus would produce puerperal septicæmia without the agency of a specific disease germ, we should surely have that affection developing in healthy country localities where the woman are attended by ignorant midwives, but where, nevertheless, it is almost an unknown disorder.

"I," says Hervieux, "who write these lines, declare that in my own country I have within the space of three years attended one thousand cases of labor, and out of that number have lost only one patient !"

And now, in summing up what I esteem the most certain and the most rational treatment of the disease styled puerperal fever, I will be as concise as possible :

As soon as the patient is stricken by the poison, certain very marked phenomena usually develop themselves with great promptness. After a chill or a slight horripilation she is affected by a high temperature, pelvic pain, considerable mental perturbation, headache, pain in the back and sometimes, though not commonly, by nausea and vomiting. We will assume, first, that the attack is a severe one in its inception ; and, second, that the patient is in such a position in life that we are not in any way hampered in our efforts to save her by considerations of economy. Having considered treatment from these standpoints, it will, of course, be easy to modify the plan so as to meet the requirements of a mild attack or of a scanty purse.

As the practitioner sits by the bedside of his patient at the commencement of her attack, he is aware that there are points connected with its true pathology which he cannot yet determine. For example, he cannot say whether the case is going to assume the form of septicæmia lymphatica or septicæmia venosa ; whether of perimetritis or parametritis; or whether thrombosis of some of the large pelvic or utero-ovarian vessels, or a true parenchymatous metritis is to play the most active part in the siege which has begun. If he fritter

away the golden moments in vague speculation; if he soothe his fears by hoping that the attack is due to malaria or milk fever; or if he cast aside the rational doctrines of to-day in favor of the idea of a general infectious and particular form of disease called by the forefathers of the French school, "*la fièvre des femmes en couche*," time will be lost which can never be regained. If, on the other hand, he is encouraged by his clinical observation to stand with many of the best pathologists and practitioners of our time in the position assumed by Hervieux—"I believe in the multiplicity of the affections classed under the head of puerperal fever; I believe in puerperal poisoning as the source of them"—he will act at once and strike at the poison before it has fairly gained a foothold. In other words, if the physician could see into the future and learn with certainty that peritonitis, cellulitis, thrombosis, lymphangitis, or true phlebitis is to be the final disorder, he should, if he reaches the case at the inception of the attack, follow, in my opinion, the course here formulated:

1. As soon as a diagnosis of septicæmia is determined upon, all pain, nervous perturbation, shock, and mental anxiety should be quieted by the hypodermic administration of ten minims of Magendie's solution of morphine, unless some special and very decided idiosyncrasy with reference to opium be ascertained to exist; and throughout the severity of the attack, whenever suffering of mind or body occurs (perhaps it will be about once in every six or eight hours), this should be repeated. In my experience, no other method of administering morphine in these particular cases compares with this, and, as it is not to be continued long, there is no fear of causing the patient to become addicted to the drug as a vice. If a small, sharp, and new needle be used, if it be thoroughly cleansed with soap and water before each time of using, and be dipped in a solution of bichloride, 1 to 1,000 of water, just before each insertion, no abscesses will occur. It is the large, rusty, unwashed and unpurified needle which the doctor's economy makes last him for many months, which so commonly results in them.

2. The physician must now decide whether, in his opinion, the septic disease which is developing has originated in the wounds situated between the os internum uteri and the vulva, or in the endometrium, above the former point. If he decide in favor of the former view, he should persist, for a time longer, in the more thorough use of vaginal injections; if of the latter, intra-uterine injections should be at once resorted to. Usually the question has to be decided by the efficacy or inefficacy of frequent germicide vaginal injections in bringing down the temperature and controlling other grave symptoms. Should the failure of these seem to prove that the origin of the disease is higher up the genital tract, more decided and radical measures must be taken.

The patient having been entirely relieved of pain and thoroughly quieted, the first injection should be practiced in this way: An Indian rubber cloth should quietly, without hurry, noise, or disturbance on the part of the nurse, be spread over the edge of the bed on which she lies, and nade to fall into a tub of warm water rendered antiseptic by the addition of 2 or 2½ per cent. of carbolic acid, or of the bichloride of mercury, 1 to 2,000,or of some other reliable germicide. Then Chamberlain's glass uterine tube, which I here show, or the very excellent and ingenious tube invented by Dr. George H. Lyman, which is here seen, thoroughly fitted to a Davidson's or Higginson's syringe, should be immersed in the tub. The nurse now aiding the patient by the shoulders, and the doctor by the hips, she should be gently laid across the bed and be made comfortable with a pillow under the head. Each foot should rest upon a chair placed at either side of the tub, and she should be entirely covered over with a couple of blankets. The doctor, now placing himself between the knees of the patient, should take the tube in his right hand while a stream of water is made to flow through it by the nurse, who squeezes the syringe bulb, and he should pass it gently up the fundus of the uterus. The stream of water, which has been steadily flowing, is now projected with gentle force againt the walls of the uterus, washing away adherent blood-clots, detaching portions of hanging membrane,and everywhere neutralizing the influence of the poison which has excited the disorder.

After the first injection the position of the patient need not be disturbed, but the injection may be given as she lies upon a bed-pan.

In some cases, in which I have had reason to suspect that portions of the placenta or membranes have been retained, I have chloroformed the patient, passed the hand, rendered thoroughly aseptic, within the cavity, and very gently scraped off adherent masses from the uterine walls, using the nails as a curette, as Wilson, of Baltimore, has advised. In some other cases I have rubbed the whole endometrium with an aseptic sponge, held in a long sponge-holder, or employed the largest of my curettes to remove clots and adherent secundines, with great apparent advantage.

That the use of antiseptic uterine injections after parturition is attended by danger is beyond question. The greatest hazard attending this plan is the entrance of air into the uterine cavity; the next, the production of hemorrhage by detaching some of the thrombi which fill the mouths of the uterine sinuses; the third, the danger of forcing the fluid used as an antiseptic directly into the general circulation, through the introduction of the tube into the mouth of a sinus; fourth, the creation of convulsions, violent pain, or nervous prostration, by a sudden and baneful influence upon the nervous system; and the fifth, the passage of the tube into a Fallopian canal, and the injection of fluid directly into the peritoneal cavity, as in a case reported by Dr. W. Gill Wylie in an interesting

paper in the *New York Medical Journal* for June 23, 1883, p. 679.

All these dangers may be, to a great extent, avoided by care as to details, by using a large injecting tube which cannot enter an open-mouthed sinus; by using water warmed to 105° ; by injecting the fluid through the tube so as to exclude air before passing this up to the os uteri ; by using only a moderate degree of force in throwing the jet against the uterine walls ; and by proceeding with the whole affair gently, cautiously, slowly, and intelligently.

The tube should never be allowed to fill the os uteri completely, so as to prevent the escape of the injected fluid. Should the cervical canal be so narrow as to hug the tube closely, it should be dilated by dilators of hard rubber, by the fingers, or Barnes' bags, before the injection is practiced.

A solution of the persulphate of iron should always be at hand in case of sudden hemorrhage from displacement of a thrombus. Should this accident occur, ergot should be immediately given hypodermically, the iron solution be at once added to the antiseptic solution and allowed to pass into the uterus, and pressure be made upon the fundus so as to stimulate the contraction of uterine fibre to accomplish closure of the open sinuses in that way. Quite a number of cases of death from this plan of treatment are on record. In a very large experience with it I have met with but one. The whole number on record would, however, fall, I think, into insignificance if weighed in the balance against the many deaths which have been due to a neglect of the means, or against those lives which have been saved by it.

After all, the question as to the dangers attending a plan of treatment are not to be settled upon mere abstract reasoning. The evil which it is known to do must be weighed in one scale, and the good which it effects in another ; and careful consideration must decide whether we are justified in accepting the former for the sake of the latter.

Judged in this manner, I feel very sure that intra-uterine injections for puerperal septicæmia deserve a place among the most valuable resources for the saving of life for which we are indebted to modern pathology.

The frequency of these intra-uterine injections should vary greatly with individual cases. In mild cases of septicæmia, where the temperature comes readily down after the uterus has been washed out, and rises very slowly, they need only be used once in every five hours ; in other cases they become necessary once in every three hours ; and in bad cases they are required once every hour. These injections should always be administered by a physician, should always be carried fully up to the fundus uteri, and should always be used with every regard to caution as to detail which has been already mentioned.

Many prefer the use of those syringes which allow of a steady flow of a stream of water propelled by gravitation, as is the case with the so-called fountain syringe, which is so popular among us. This is partly because greater safety is supposed to attach to these, and partly from a theory that danger attends the propulsion of a stream by intermittent jet against the uterine walls. For a number of years I shared this belief, but experience has taught me that a gentle projection of the fluid is an advantage, that by this means a more thorough cleansing is accomplished, and that with due caution no more danger attends the plan than that by the steady flow.

Some have adopted continuous irrigation of the uterine cavity, but this is, I feel perfectly certain, a delusion and a snare. It gives the appearance of great thoroughness, which it does not possess, for the reason that by this plan it is very difficult to bring the germicide fluid into full contact with the entire endometrium. For vaginal irrigation it is an excellent method, but I have seen it allow the temperature to remain high when applied to the uterine cavity, and have replaced it by the intermittent douche, used only as often as every three hours, with striking results. Nevertheless, in very severe cases I prefer to employ continuous irrigation, replacing its use every third hour by that of the intermittent current ; rather than exhaust my patient by half-hour disturbances and injections, as has been by some advised.

After all that has been said on this subject, the essential fact is this : that plan is best which accomplishes most perfectly the cleansing of the parturient canal. With ordinary precautions, danger need not necessarily attach to any method.

3. The uterus having now been thoroughly cleansed, and the patient entirely quieted, attention should be turned to controlling the temperature, which in septicæmia of puerperal character runs so high and maintains itself at so exalted a range as to constitute one of the immediate factors of a fatal issue. Even if this were not the case, the patient's strength is so much exhausted by prolonged high temperature, her nerve powers so much depreciated, her blood-state so rapidly injured, and her comfort so decidedly interfered with, that these considerations alone would point to the propriety of combating hyperpyrexia. For this purpose I formerly relied upon the affusion of cold or tepid water, the patient lying upon Kibbee's cot ; at present I accomplish the same result more easily and more pleasantly for the patient by the use of Chamberlain's rubber tube coil, which I here show. A mat, composed of a rubber tube rolled upon itself in a circle, covers the whole abdomen from the ensiform cartilage to the symphysis pubis ; the upper end of the tube which makes this mat is anchored by a weight in a tub of ice-water, placed about three feet above the level of the patient, and the lower end falls into a tub upon the floor. By siphon action the water of the elevated tub runs through the tube which constitutes the mat, and collects in the receptacle on the floor. By this means a temperature of 104° can very

readily, as a rule, for there are exceptions to the rule, be kept at 100° for weeks together.

Unfortunately, there are almost unsurmountable difficulties connected with the use of this invaluable method in the minds of the patient's friends, the patient herself, the nurse, and, alas, too often, the attending physician. You are told that the patient becomes chilled, that the coil prevents her resting, that the temperature absolutely goes up under its use and descends whenever it is left off. By the doctor you are apt to be informed that his fear of resulting pleurisy, bronchitis or pneumonia is very great.

I will merely say, in refutation to these charges, that in my service in the Woman's Hospital, where convalescents from laparotomy are constantly under treatment in large numbers, this means of controlling temperature is as commonly and as freely in use as poultices are in general hospitals, or gargles in dispensaries for diseases of the throat. We never meet with any of these difficulties, and very rarely with failures as to the desired result, and I believe that I am correct in saying that successive house-staffs whose duty it has been to carry out the plan have thus far had, to a man, the most implicit faith in its beneficial agency.

There are some peculiarities about it, however, which I must mention: Very often the coil will not succeed in controlling the temperature, for twenty-four hours; its prolonged use alone develops and illustrates its great benefits; and removing it from the body for an hour at a time damages its influence very much. I have never seen evil result from the chilliness which it excites, if hot bottles be kept at the soles of the feet, and in not one instance out of hundreds of cases have I seen pneumonia or pleurisy excited by it.

4. The nervous system should be kept under the influence of febrifuge medicines as to keep under the control the tendency to chill and pyrexia. For this purpose, fifteen grains of sulphate of quinine should be given in capsule or by suppository night and morning, or in place of this, two capsules may be given night and morning of Warburg's tincture, in the form of solid extract, as advised by Dr. J. T. Metcalf. Lastly, to the same end, the salicylate of sodium may be employed.

5. The patient's diet should consist entirely of fluid food, given often, and in small amounts. The staple article should be milk, but animal broths and gruels may be alternated with it with advantage.

6. At the very commencement of such a case the attending physician should, in the patient's interest, surround himself with efficient and abundant assistance. If he undertake to wash out the uterus every four or five hours without other assistance than that of the nurse; and if the patient is to rely for the constant attention and care which she will inevitably require, upon one nurse, it is needless to point out that the duty of both doctor and nurse—vital duties, be it remembered—will be but half performed. And, unfortunately, the penalty will fall upon the patient and her friends.

For a case of puerperal septicæmia to be properly treated in private practice bythe plan here advocated, it is necessary for the attending physician to associate with himself some young practtioner, who has the time to devote to the case, and the intelligence to use the uterine douche safely and efficiently. Furthermore, two nurses are necessary: one to be in charge for twelve hours, and the other then to relieve and replace her for an equal time. Without the rest and sleep thus afforded, no nurse taking charge of such exacting cases as these can possibly do her duty in such a way as to subserve the patient's interest. As a rule, the nurse will begin with the declaration that she is competent and willing to take entire charge; that she is one of those people who can do without sleep, etc.; and her heroic offers of self-sacrifice are hailed with enthusiasm by the terrified family. To believe in and to act upon this would be very foolish and very dangerous. After three nights of watching, this same nurse would snore through the hours in which her patient needed her, give the wrong medicines, mislead the doctor, allow the bladder to become distended with urine, and fail in every requirement of the occasion.

If the patient cannot bear the great expense attendant upon the extra service which I have mentioned, it is her misfortune, and for such as herself the doors of our hospitals are open. There is no case of ovariotomy in the Woman's Hospital, however poor the patient be, upon which, thanks to the generous arrangements of its managers, just such attendance as I have mentioned is not lavished.

The antiseptics which have heretofore been tried under these circumstances are thymol, boric acid, salicylic acid, carbolic acid, and mercuric bichloride. Of these, all have disappeared before the superior merits of the last two; and carbolic acid, which for so long a time has been almost supreme, appears about to be abolished in favor of the bichloride of mercury, 1 part to 1,000 or 2,000 of water. For all antiseptic purposes outside of the uterus, the bichloride is now, owing to the carefully made and important investigations of Koch, very generally employed in the strength of 1 to 1,000, and the uterus has now been washed out with this excellent germicide 1 to 2,000, often enough to make us regard its use as an intra-uterine injection as entirely warrantable. If carbolic acid be used in that way, it will not be safe to carry its strength beyond a two, or, at most, a two-and-a-half per cent. solution.

INFANT FEEDING.

BY JOHN M. KEATING, M. D.,

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It has been my custom for some years, after having brought before the class numerous cases of children's diseases which make our clinic so interesting, to call your attention to an important

branch of your life work, infant feeding, a subject that upon superficial thought seems so simple that the majority of medical students are apt to pass it by as pertaining to the nurse and not to the doctor; yet my association with recent graduates enables me to say that it is the one subject that comes up before them soon after entering their medical career, and often it is not merely a matter which is important for the moment and easily evaded, but becomes either the portal of entrance to a large practice, or the starting point of embarrassments and disappointments which render their arduous duties even more irksome.

I wish distinctly to state, that though I shall dwell at length upon the feeding of infants with prepared food, I do not wish to be understood to underrate the value of mother's milk or in its stead that of a reliable and well-developed wet-nurse; there are times when a mother cannot and should not nurse her child, a wet-nurse should then be the first thought; then again I may also state, at this point, that a child which has been nursed for a short period can be very much more easily brought up by hand than one who is obliged to be hand-fed from birth.

The great question which has always given rise to so much hesitation and difficulty in its answer is upon what food to place a child. This at times is perplexing; it depends upon various conditions; it depends upon age of child, upon its health, upon its residence, country or city, and upon the circumstances of the family. All these should be taken into consideration; is it to be weaned gradually, or is it necessary that hand-feeding should constitute its only supply? If you attempt to study this matter from your text-books, you will be dazed with the number of suggestions there presented. It is well that you should form in your own mind the regular course to follow in such cases, and avoid the unfortunate way of answering your inquirer, the fond mother or nurse, by saying, "try this," or "try that." It should not be a matter of trial.

Let me say now that *milk* should form the basis of all preparations of food. It is not necessary for me to show you the difference between cow's and mother's milk. I will refer you to your physiological tables, and also those of you who read the medical journals of the day to the interesting investigations of Prof. Leeds and Dr. A. V. Meigs, who have studied this matter with great care.

There have been several ways suggested of preparing the food for infants, one taking mother's milk as a guide, and endeavoring to make cow's milk approach the human standard as near as possible by dilution and the addition of sugar of milk. For this purpose Dr. Meigs has suggested the following formula: Order five or six packages of milk-sugar, containing seventeen and three-quarter drachms each; the contents of one of these to be dissolved in a pint of water, and each time the child is to be fed let there be mixed together and then warmed, three tablespoonfuls of the sugar solution, two of lime-water, two of cream and one of milk. This makes about a gill, and as much of it as the child does not take should be thrown out and a fresh mixture made for the next feeding. The solution of sugar should be kept in cool place and at once thrown away if it sours, as occurs if kept more than a day or two in warm weather. The dry sugar keeps indefinitely, and is easily dissolved in warm water. A pint bottle should be kept for the purpose of containing the solution, to serve also as a measure of the quantity of water to be used with each package dissolved, and also to save further measuring. The milk to be used should be good ordinary cow's milk, and not the very rich milk of Jersey or other high-bred stock, and the cream in the same way should be such as is usually sold in the cities, and not too rich, containing about sixteen or seventeen per cent, of fat. The quantity of this food taken by a new-born infant should be two or three fluid ounces every two hours, and if it thrive it will soon take as much as a gill every two hours.

Then there are the various preparations in the market of the cereals proper, whose use I shall tell you more of in a few moments, and those of the cereals that have undergone change into dextrine and glucose by malting, and those foods which are composed of milk, either preserved, condensed, or prepared in a more solid form. These preparations are expensive, not to be procured in every drug store, and furthermore are somewhat perishable, so I shall talk to you to-day of the "home-made" foods, to which I advise you to adhere for a time.

Let us suppose that you are confronted with a case in which the mother, having nursed her child some months, finds her milk gone, and it becomes necessary to establish hand-feeding. She tells you that her child no longer receives the amount of nourishment that it should. Convince yourself of this fact before you make any change; take the appearance of child into consideration, examine its muscles to see if they are firm, and judge whether or not it presents the rosy hue of health. Examine the mother's breast, and if you think that a course of tonics, with outdoor exercise or change of food will increase the supply, by all means have recourse to them before making a change. Remember that the milk does not always remain constantly in the mother's breast, and that frequently those who are able to nourish their children with an abundant supply have, between nursing hours, scarcely any evidence of milk whatever; the application of the child will, however, produce a flow in a few moments.

I give you all these points because frequently mothers wish to wean their children too young, and I firmly believe that encouragement and firmness on the part of the doctor will in very many cases give a child a far better chance in after life. If the child is six months old, or thereabouts, and you find it necessary to establish handfeeding at once, the following would probably be the best plan to adopt: Order nurse or mother to take a quart of

morning's milk which is pure and fresh—better than not from a mixed dairy—and dilute with a half of a pint of water; put on to boil; take of Robinson's prepared barley, which comes in packages, a heaping dessertspoonful or tablespoonful; rub this to an even paste with a small quantity of milk; then add to it the milk that is boiling, and *stir this for twenty to thirty minutes*, letting it boil. This should be strained, and a small quantity, say a teaspoonful, of white sugar added to it, the whole to be placed in the refrigerator for the day. When cool a jelly will be formed. Of this the child should take about four ounces, made fluid by heating, and strained in bottle or by spoon, every three or four hours. The last feeding would for a time be about ten o'clock in the evening; after a few months the child will need nothing after usual bed-time until first meal in the morning, at about seven o'clock.

Barley flour seems to hold a position somewhat neutral as regards action on the intestinal tract. Should the bowels become constipated, or should you desire to change the food, a preparation of oatmeal known as "Bethlehem Oat Meal" can be used in the same way as the prepared barley. The wheat foods may be used in the same way; they are apt to constipate, however.

At times it may be well in preparing the food to mix these various articles, as a child needs a variety in taste as well as a grown person. If a child is younger than six months, of course it will be necessary to add a larger percentage of water and a smaller amount of cereal. I am satisfied, from investigations made last year (Some Observations. on the Salivary Digestion of Starch by Infants Trans., College of Physicians, Third Series, Vol. VI.), that infants are able in some degree to digest a small quantity of starchy food, and that the starch contained in the above described preparation is not merely useful in preventing the formation of a heavy curd, but that it also is useful in nutrition. I have found the preparation that I have suggested to you applicable in the majority of cases, and especially in those children who are apt to suffer from indigestion during the summer season, with its unfortunate results. It is also useful when gradual weaning is thought advisable. In such cases the child is nursed from the mother in the early morning; after its bath, say ten A. M., it is to take its bottle or cup of food; nurse again at *one* or *two*, a cup of food at six, and again nurse at ten in the evening. As far as condensed milk is concerned, I am satisfied that it is an extremely valuable preparation, but not one upon which it should be attempted to raise a child. It is useful as a bridge to tide over difficulties, and as such can be relied upon, but a child that is brought up on condensed milk alone from an early period is, in my experience, liable to succumb more rapidly to the influence of disorders than other children, either nursed or fed with cow's milk, are able to withstand. Prejudice has frequently interfered with the use of condensed milk, I regret to say. It is certainly nutritious and easy of digestion, and frequently will agree, when properly administered, with a child whose stomach is intolerant of other food. Of the purity of the brand usually used there is no question, and I would advise you to study this matter carefully yourselves, and not throw away a valuable food because many statements are made against it.

It is easy enough to find some form of diet that will nourish a healthy child. The most difficult problem to solve is the food to be administered to an infant who is delicate from birth and cannot nurse, one who is suffering from some form of intestinal catarrh, or one whose digestion has been totally upset by a severe attack of summer complaint.

These are in fact the most difficult cases that we have to deal with; in treating such cases we should bear in mind that a child's food should not be made so extremely weak, in order to avoid all irritating qualities, as to make it fail in its object of supplying nutrition, but we must endeavor to make the child's digestive functions meet us half way, and thereby establish an equilibrium; we can either do this by the administration of those drugs which are known to facilitate digestion, such as the various forms of pepsine or pancreatine as the case demands, or we should endeavor by tonic influences to bring about a healthy establishment of the functions of those organs whose secretions are needed for the proper digestion of food.

If a child is so weak and exhausted that it will not digest the mildest form of prepared food, and it is impossible to obtain breast milk, for this should be our first thought, it is useless to weaken the condensed milk, or whatever we use, to such a degree as to make it absolutely valueless as a nutrient; the proper thing to do, under such circumstances, is, in my opinion, to give some form of food which requires but little action of the digestive juices, or to prepare the food so that it is partially digested beforehand.

I have used for some time with great advantage, egg albumen dissolved in water, as a food for sick children when the stomach was intolerant of ordinary milk food, also gum arabic water will nourish for a surprisingly long time, and allay irritability.

The barley food, as recommended above, would be valueless in a case of this kind, and pure cow's milk diluted to resemble as closely as possible the mother's milk, would be regurgitated; in such cases, and they are very frequent in the summer months, especially if you are called much in consultation practice, the preparation of milk which has undergone partial digestion by the pancreatic ferment, in an alkaline condition, I have found most useful. The preparation is one which must be made with care and according to the following directions: Into a clean quart bottle put a powder of five grains of Extractum Pancreatis and fifteen grains of bi-carbonate of soda, and a gill of water; shake; then add a pint of fresh milk. Place the bottle in a pitcher of hot water, or set the bottle

aside in a warm place for an hour or an hour and a half, to keep the milk warm; by this time the milk will become peptonised. When the contents of the bottle acquire a greyish yellow color and a slightly bitter taste, then the milk is thoroughly peptonised; that is to say, that the caseine of the milk has been digested into peptone. Great heat or cold will destroy this digestive action, so to prevent all further action, when you think that the digestion has progressed far enough, at once place the bottle of peptonised milk on ice, or into a vessel of boiling water long enough to scald its contents; it may then be kept like ordinary milk.

I have found from experience that it will be objectionable to the child if the bitter taste is at all well marked; the mother, who should receive your instructions, should be warned to frequently taste the milk during its digestion, and as soon as the bitter taste is the *least* apparent, the bottle should be placed on the ice for cooling and use, as in these instances it is sufficient to partially peptonise the milk.

I mention these facts particularly, as, strange to say, I have always failed with it in hospital practice, whereas in private practice I have had some excellent results, owing, I think, to extra care in its preparation.

Whey is another admirable alternative in these cases; it can be made in the usual way by rennet, and afterwards sweetened slightly and given to the child cold or warm as it prefers, in the same manner as ordinary bottle feeding; it may be made with wine and given when there is great weakness, being both nourishment and stimulant. Mothers do not often know how to make wine whey; the proper method is to put the milk to boil and when boiling put a wineglassful of sherry, say to the pint, into it, if the curd does not separate add more wine until it does, and as soon as you notice separation of the curd taking place add no more wine, but let the mixture boil for a time, until the whey and curd have been thoroughly separated, consuming about five minutes. This should be then thoroughly strained. It has been recommended to use lime water in the feeding of infants and young children. I am opposed to its indiscriminate use. I have seen children who could not tolerate even the ordinary weak preparation of the pharmacopeia: undoubtedly at times it may arrest vomiting, as we all know, both in children and adult practice, but I much prefer when it is necessary to use an alkali, and if you use cow's milk raw for a young babe, it is always advisable to see that it is made alkaline, to do it with a small quantity of bi-carbonate of soda.

The food which I have recommended to you above for the weaning of children I am sure that you will find it to work satisfactorily, especially in large cities, where the milk supply is so apt not to be reliable, and on that account so difficult to keep sweet without boiling. I have one word of caution to give you in regard to the use of nursing bottles. They are certainly useful as labor-saving machines in early infancy, and when thoroughly cleaned and carefully watched are no doubt indispensable, but I have long since come to the conclusion that if you can persuade the mother and nurse to take the time and have the patience to feed a child that is old enough to manage by the cup or spoon, the word *colic* will seldom meet you in your practice. I am convinced that in institutions for foundlings, if it could be possible to discard the bottle, the percentage of deaths would be very much diminished.—*Archives of Pediatrics.*

DANDRUFF: WHAT IT IS, AND HOW TO CURE IT.

By Georoe T. Jackson, M.D.

The term dandruff, or dandriff, has often been very loosely used to designate at least four distinct diseases of the scalp, namely; pityriasis simplex, seborrhœa sicca, eczema erythematosum or squamosam and psoriasis, and it is probable that a fifth disease has been included under it, namely, a diffuse trichophytosis capitis. Properly speaking, its use should be limited to that scaly condition of the head which is due to seborrhœa sicca or pityriasis simplex.

Whether these latter two diseases are identical or not is still an unsettled question. By the majority of the German systematic writers they are regarded as one and the same disease, but they present enough points of difference to entitle them to separate consideration. I have here placed them together for convenience, as they give rise to a somewhat similar condition of the scalp, and are amenable to the same treatment. To draw the line sharply between the two is sometimes exceeding difficult.

Seborrhœa sicca is a functional disease of the sebaceous glands in which an abnormal amount of sebaceous matter of abnormal consistence is secreted by them. This dries upon the scalp, and either appears in the form of thin, fatty plates about the mouths of the hair-follicles, or adheres to the hairs in flakes, or, if of more pronounced nature, heaps up into thick, fatty masses or cakes which cling with a good deal of tenacity to the scalp. This latter form is seen very frequently in children during the early months of infancy. If portions of these crusts or cakes are rubbed between the thumb and finger they will impart an unctuous feeling. The scalp in this disease is usually pale or leaden-hued, and when the crusts are removed shows no tendency to moisture, or else exhibits a fatty, glistening surface upon which the crust is soon renewed. In some cases more activity is shown, and the scalp is hyperæmic. The affection runs a chronic course, is generally quite uniformly distributed over the whole head, but in some cases it is confined for the most part to the edge of the hair over the forehead and to the vertex of the head. Some pruritus at times is present, and sometimes, in consequence of scratching, there

will be excoriations. When we have the head covered with thick, fatty crusts which give an unctuous feeling when rubbed between the thumb and finger, and upon being removed leave the scalp pale there will not be any difficulty about the diagnosis. But in those cases in which only dry scales are present and the scalp is slightly hyperæmic, our decision as to the disease cannot be so readily given.

Pityriasis simplex, or *capillitii*, is essentially an interference with the cornification of the upper cell-layers of the skin, on account of which, instead of the normally compact stratum corneum we have a constant scaling off of the imperfectly formed epithelial scales. The whole scalp may be quite uniformly affected, or the disease may be limited to the vertex, or it may occur in circumscribed patches. The scales are thin, easily detached from the scalp, sometimes so easily as to be readily blown off, and they do not pile up into crusts. When rubbed between the thumb and finger these scales do not impart the same unctuous feeling as do those of seborrhæa sicca, though there is usually a certain amount of sebaceous matter present, as in seborrhœa sicca there is always an admixture of epithelial scales. More or less hyperæmia is usually present, though in some cases the scalp is of normal color. Thereis never any moisture of the scalp. Pruritus often annoys the patient, especially when he is overheated or is using his brain actively, and this, inviting scratching, excoriations are often met with.

These two diseases, differing mainly in their essential lesion and constituting dandruff, cause annoyance by the constant falling of the scales upon the shoulders of the patient, ruining the clothing, or giving it the appearance of being powdered, and by the pruritus which attends them. It is for these reasons, in most cases, that the patients apply to us for relief. But dandruff is in many cases the forerunner of baldness, and the fact that a long-continued seborrhœa sicca, or pityriasis, is the most frequent cause of premature alopecia should stimulate us to our best efforts to cure the disease.

Causes.—Dandruff frequently occurs in strumous individuals who are anæmic and have a sluggish circulation, marked by cold hands and feet. Adolescence is its peculiar time of appearance, and chlorotic young girls are apt to be annoyed by it. It is attendant upon chronic debilitating diseases, as rheumatism, syphilis, phthisis, and the like, and comes on after profound disturbances of the constitution, such as fevers and parturition. Dyspepsia and constipation are very common exciting causes or aggravants of the disease. Improper care of the scalp, the use of the fine-toothed comb, and of pomades, hair "tonics," and hair-dyes will give rise to the disorder. In some cases there is apparently no cause for the disease, but careful inquiry, even in these cases, will usually bring out some latent cause, such as worry, overwork, mental or nervous strain, and the like. Malassez, Thin, and some others claim to have found a parasite as the trouble, and recent experiments by Lassar and Bishop would seem to prove that the disease, at least pityriasis simplex, is contagious. These investigators (Lassar and Bishop), took the hair and scales from the head of a healthy German medical student, made a pomade by chopping them up and mixing them with vaseline, and rubbed it into the back of a guinea-pig and of a rabbit. In the course of three weeks these animals presented an appearance similar to that of the student. The experiment was twice repeated, using the hair and scales from the first and second pair of animals respectively, and with like result.

Diagnosis.—Before we can intelligently treat a case of scurfiness of the scalp we must arrive at a coarect diagnosis, and must differentiate between dandruff on the one hand and eczema, psoriasis, and diffuse trichophytosis capitis on the other.

Eczema is distinguished by the scales not being so abundant or so greasy as in dandruff: by their being more parchment-like, as if formed rather of dried serum than inspissated fat; by the disease not being so diffuse but, more limited to certain patches, or to one side of the head, and implicating contiguous non-hairy parts; by the greater amount of hyperæmia; by the moisture which is either present or readily induced by scratching; by its being far more pruriginous, and by its history. If thick crusts are present they will usually be of a greenish-yellow color, and when removed will expose a reddened oozing surface.

Psoriasis rarely occurs upon the scalp without being found on other parts of the body. It occurs in the form of circumscribed round, or oval reddish infiltrated patches, which, if of large, size are seen to be composed of a number of smaller round patches which have joined together at their edges. These patches are covered with a thick mass of grayish or white glistening scales, which are not greasy, and, on being removed, expose a number of minute bleeding points or red dots, and do not reform as quickly as those of seborrhœa. The disease tends to form a fringe under the hair on the forehead, and sometimes to push its white, glistening, scaly surface down upon the forehead, and often presents a patch just in front of the ear.

Trichophytosis capitis (tinea tonsurans), when occurring as a "ringworm," should offer no difficulty in diagnosis, its circular shape and the presence of broken and gnawed-off hairs being pathognomonic. The diffuse form is rare, and is to be diagnosed by its history of gradual spread from numerous reddish points or papules, by its scales not being greasy, by the hair being broken off and fragile, and by the microscopical examination of the hair and scales, which will reveal the trichophyton fungus in abundance.

Besides these three diseases lupus erythematosus may sometimes call for differentiation. It is rarely met with upon the scalp, and then occurs in the form of a sharply defined patch with an infiltrated reddened base covered by a thin adherent scale,

which, being raised, shows on its under side a number of prolongations, the sebum plugs withdrawn from the follicles. The disease causes loss of hair and well-marked atrophic changes in the scalp.

Treatment.—A good deal in the way of preventive treatment of dandruff can be accomplished by the proper care of the scalp and of the general health. More care than is usual should be bestowed upon the operations of brushing and combing the hair, washing the scalp, and upon the selection of the brush and comb. The brush should be composed of bristles well set into the back. The bristles should be placed in little clumps at regular distances and rather far apart, and those in each clump should be of unequal length and arranged so that the longest ones are in the centre of the group. It is well to have two brushes, one stiff enough to warm the scalp when used with vigor, and one quite soft. The comb should be made with large teeth set wide apart. When held up to the light the teeth should show no roughness or inequality of surface. The fine-toothed comb should be banished from the toilet-table, as it is an active agent in producing inflammatory conditions of the scalp, as many a case of eczema capitis in children will testify. In the morning the hair should be thoroughly opened up in all directions with the comb, and it and the scalp brushed vigorously with the stiff brush. Then the stiff brush should be laid away for the day, and the soft one used in parting the hair, in polishing it, and in subsequent brushings during the day.

Do not wash the head too much. I believe that the so commonly practised daily sousing of the head in water is hurtful to the hair and scalp, epecially if they are not carefully and thoroughly dried afterward, and a little oil or vaseline rubbed into the scalp. It is not the daily sousing which is objectionable, but the insufficient after-care. Water renders the hair dry, and the daily sousing only washes the head superficially. A good shampoo every week or ten days for those persons exposed to a good deal of dust, and every two or three weeks for other people, is sufficient for cleanliness. For the shampoo, soap and water, borax and water, or one composed of the yolk of an egg beaten up in lime-water, are still simple and good, but it must not be forgotten to wash out these materials with plenty of clean water and to thoroughly dry the hair and scalp.

Patent hair "tonics," pomades, washes, and dyes are to be avoided. Those containing grease —the pomades—are, to use an Anglicism, "nasty," give the hair an unnatural lustre, smear the hat-band and whatever the hair touches, and, becoming rancid, act as local irritants. None of these dressings are needed by the healthy scalp, and the proper care of the scalp as above indicated will preserve the hair in better condition than they will.

The nearer the body can be kept to the standard of perfect health by means of bathing, exercise, and good diet, the less likely is dandruff to develop. When, therefore, the disease has appeared, and we are applied to for relief, one of our first inquiries should be concerning the general health, and our first efforts addressed to remedying anything found to be wrong. For, important as our local measures are in relieving the local disorder, in most cases we must depend upon internal treament to render the cure permanent. The internal treatment must be along the lines marked out in works upon general medicine—tonics, as cod-liver oil and iron, for the debilitated; the acids and bitters for the neurotic and dyspeptic; mercurials, podophyllin, and the like for the bilious, etc. Duhring recommends sulphur and the sulphide of calcium as of especial efficacy, and arsenic sometimes acts well. We should insist upon our patient obeying the laws of general hygiene, and instruct him in the above or similar rules as to the proper care of the scalp.

Various substances, all of a more or less irritating nature, have been recommended for the local treatment of dandruff. Such are tincture of cantharides, ℥ j.– ℥ j.; tincture of capsicum, ℥ j. ℥ j.; chloral, ℥ j.–℥ j.; bichloride of mercury gr. ij to iij.– ℥; the oleate and other mercurials in proportionate strength; sulphur, ℥ j.–℥ j.; carbolic acid, gr. x. to xx.–℥ j.; quinia, strychnia, etc. These have been given either in solution in alcohol, water, or the oils of olive, castor, rosemary, sage, etc.; or as ointments. A good menstruum for their exhibition is composed of glycerine, ℥ j.–ij., to dilute alcohol, ℥ j. Vaseline forms the best medium for their exhibition as ointments. Excepting where the hair is decidedly thin, so stiff an ointment as the ungt. zinci oxid. should not be used, and lard itself is apt to become rancid,

Of all the above remedies, I have been led by experience to place my main reliance upon sulphur and the mercurials, and would advise the following plan of local treatment. If the case presents itself with a decided accumulation of scales, or if crusts are present, direct the patient to saturate his head with oil, preferably sweet almond oil, before going to bed, and to place over his head a flannel cloth soaked in the oil, and outside of all an oiled silk cap. The next morning he should shampoo his head thoroughly with soap and water, using by preference the tincture of green soap, and wash out the soap with plenty of water. The scalp is then to be dried by vigorous rubbing with a coarse towel, and the hair by pulling it through a soft towel. If the crusts by this method are not completely removed, the oil should be kept on during the day, the head again soaked at night and washed with the soap and water in the morning. If the scalp should appear very hyperæmic after the crusts are removed, anoint the head with vaseline or some simple ointment, as rose ointment, until the hyperæmia is lessened. When the crusts are removed and the hyperæmia overcome, have an ointment composed of one drachm of sulphur loti to one ounce of vaseline applied every morning to

the scalp. If the scales form rapidly apply the oil every night and the sulphur ointment every morning, and wash the head every second or third day. As soon as scaling is lessened stop the use of the oil, but continue the ointment, at first using it every second morning, then gradually reducing its application to once a week. Throughout this plan of treatment the head should be shampooed about once a week with the tincture of green soap, borax and water, or the yolks of three eggs beaten up in one pint of limewater, to which a half ounce of alcohol is added. Another excellent ointment for these cases, for the formula of which I am indebted to Prof. Bronson, of the New York Polyclinic, is composed as follows:

℞. Hydrarg. ammon..... gr. xx.
Hydrarg. chlor. mitis..... gr. xi.
Petrolati..... ʒj. M.

This applied once or twice a day has yielded most admirable results in a number of cases of simple dandruff. Its consistence being that of a Mayonnaise dressing renders it an elegant pomade for private practice. Its use should be combined with the occasional shampoo as directed above.

The persistent and systematic use of either of these two plans of treatment, together with a proper oversight over the general health, should cure every case of dandruff. But we should be prepared for occasional relapses, and not give our patients promise of too speedy a cure.—*The Medical Record.*

A CASE OF TRUE CROUP TREATED BY LARGE DOSES OF MERCURY.

By O. Schultz, M.D,

(*Continued from June Number.*)

Since few persons have had an opportunity of watching the effects of large and oft repeated doses of mercury, I will here report a case of true croup, in which I followed out Reiter's method fully and to the letter. The case was in my own three-year-old Rudolph; and as I had lost a very promising child but a few months before from the same disease, you can well imagine the misgivings with which I grasped Reiter's straw.

The boy got well. The course of the disease under the mercurial treatment was exactly as Reiter has so graphically portrayed it; no markedly untoward symptoms appeared, still I beg not to be understood as indorsing the treatment; *I merely gave my own child the benefit of a doubt, and I present the case simply as a pharmacological study.*

The Case: Rudolph, a remarkably strong child of three and a half years, had been out-doors playing the larger part of March 11th, a day which opened with a morning temperature of 60°, brought several hard rain-showers, and closed with the thermometer at 45°. The temperature on morning of 12th was 35°. The child had been very healthy; had passed through an attack of laryngeal catarrh (pseudo-croup) about two years ago, and had several slight bronchial catarrhs during the present winter. On March 11th he was entirely well, and had been so for more than a month. During the night of 11th–12th he coughed three to four times—a hoarse, hacking cough. On morning of 12th he was quite hoarse; hoarseness wore off during the day; feverish; cough not frequent but barking; no coryza; no bronchial catarrh. He was given iodine and aconite. By evening breathing had become stridulous; cough not very frequent, but barking; voice clear, except when excited, when it became raw and coarse. Sleep during night was much broken; seasons of moderately easy respiration, alternating with seasons of laborious, stridulous breathing, almost bordering on dyspnæic seizures. During these he tosses about, wakes up, and gasps for breath. On morning of 13th he looks pale; face bloated somewhat; throat swelled. He is not hoarse, but his voice is remarkably weak, flat, without any timbre, and readily creaks; the cough is very hoarse, barking, and more frequent. Respiration is very hurried, composed of crowing inspiration and rough blowing expiration. A severe dyspnæic attack occurred at 8 A.M. No appetite. Patient is feverish; the pulse is very rapid, small, 160-180. The sensorium is greatly dulled; usually a bright, sprightly lad, he lies in complete apathy. The velum palati and the tonsils are somewhat swollen; no membrane within view. No signs of nasal or bronchial catarrh. In larynx there is rattling of dry character. Iodine and aconite (Willehaudt's solution, gtt. ¼, and fl. extr. aconit. rad. gtt. ⅛, every two hours,) have been diligently kept up since yesterday morning.

It is a fact, established by my experience in hundreds of cases of laryngitis, that under the above combination very marked improvement sets in in all the croup symptoms within a very few hours after the inception of this treatment, and that the few cases that do not yield to these agents, but in which the general local symptoms get worse and worse during the first twenty-four hours of its use are doomed to die. The first class contains the many cases of pseudo-croup that annually come into my hands, and which get well under any treatment; the latter represents the few cases of true croup of which I had so far succeeded in saving not one. So valuable do I consider this line of treatment, when the question of diagnosis lies between false croup and true, and so certain and infallible do I regard it, that I trust in it as implicitly as I do in *quinine* to *differentiate a malarial affection* and in *mercury and potassium iodide to single out a syphilitic trouble. Each and every one of my cases of croup that did not respond favorably to the above line of treatment terminated fatally*, although I employed in them the various methods

known, except tracheotomy, which I have not yet been permitted to practice.

It may now be readily understood with what mental agony I saw my boy rapidly passing from bad to worse, and how I longed to avert a calamity which experience had shown me to be unavoidable, and which had overtaken his brother a few months before, he dying the most horrible of deaths in my own arms.

In my despair I concluded to try Reiter's method. The treatment was begun at 9 A.M. on 13th. The patient was given calomel: twenty grains at 9 A.M., ten grains at 10, five grains each at 11, 12, 1, 2:30, 4:30, 6:30, 8:30, 10:30, 12:30, 2:30, and 5 A.M. of 14th, being *eighty-five grains* in twenty hours. No other remedial measure was made use of.

During this time his condition was as follows: At twelve M. of 13th he is sleeping quietly, breathing easily; the hard sound in inspiration and expiration is replaced by a soft gurgling or babbling; the cough is loose; large, loose râles are heard in larynx; the surface is warmer than normal, soft but not moist; the pulse is very fast and small. At 2 P.M. profuse vomiting; glairy mucus with yellowish flakes; there is one thin, loose, not fetid, passage. At 2:30 no more dyspnea; stridor entirely absent; voice clearer, stronger; cough not frequent, loose, barking. Vomited again at 2:45; water and flakes looking like membrane, bearing occasional clots of blood; a similar vomit at 4, and a thin, loose stool containing flakes of white mucus. At 6 is bright, playful, breathing noiselessly, eats some, which he has not done since yesterday; cough still hoarse, loose; voice clear, possessing some timbre, not much given to creaking. Went to sleep at eight o'clock sleeping quietly, breathing normally, without any rattling in larynx or any signs of dyspnea; no fever; an abundant, dark passage, coming on rather hurriedly at 11. From this on he slept soundly and well till morning, his sleep broken only by occasional barking cough and by taking his medicine. At 7 A.M. of 14th he had another dark passage; the voice is clear; cough at times hoarse, at times not loose; respiration easy and noiseless some feverishness, and pulse is rapid and small. Hydrargyrum bichlorid, one-sixteenth grain, is ordered every two hours; but the second dose causing vomiting in half an hour, the dose is reduced to one thirty-second of a grain. About noon began to complain of frequent attacks of belly-ache. Cough is only at times hoarse, respiration is easy, voice is clear; no appetite, no fever. By 4 P. M. has had two passages; the pain in the abdomen continues, is paroxysmal. In evening the cough appears drier and is more frequent, and has the characteristics of bronchial cough; small dry râles are heard now for the first lime in both lungs. At 10 P.M. hydrargyrum bichlorid., one one-hundredth grain, and ipecac was begun—a dose every two hours. At night patient slept quietly and well, with scarcely any cough.

At 7 A. M. of 15th somewhat hoarse; appetite better; bright and playful; looks pale and has lost considerable flesh; belly-ache is gone; bowels are normal; cough raw, dry, not hoarse, not severe; mercury and ipecac continued.

On 16th the bronchial catarrh was in resolution; soft, mucous râles had taken the place of dry sibilant; cough loose, not hoarse; the boy was bright and playful; appetite had fully returned; bowels moved normally. The medication was kept up till 17th, when there was no further occasion for its continuance.

Remarks: The change from 9 to 12 o'clock of the first day was something wonderful. Several hours before vomiting occurred respiration had become easy and the obstruction in the larynx softened. Patient was lying in a peaceful slumber, the anxious expression of the morning entirely effaced.

As further proof of the melting away of the exudation we find a few hours later the voice partly resuming its timbre. Quite a change from the weak, dead, flat sound of the morning. The vomited matter evidently contained portions of membrane. The act of vomiting was a sudden and powerful effort. There was not much gagging, and after the stomach was relieved quiet was restored. The vomiting was evidently caused by the mercury. There were but six easy feculent passages in the forty-eight hours of the mercurial treatment. There was no straining, but considerable tormina set in on the second day, which at once disappeared when the dose of the mercurial was diminished. The bronchitis following upon the croup was evidently equally benented with the primary disease. The mental hebetude, feverishness, extremely rapid, soft and small pulse, pale, bloated face, swollen neck, steady increase in the laryngeal symptoms notwithstanding the previous treatment, justify the diagnosis of true croup; and this opinion is confirmed by the flakes of membrane vomited and the course of the disease, corresponding, as it does, in all respects with that described by Dr. Reiter, the originator of this method of treatment.—*Am. Pract.*

A VALUABLE REMEDY FOR HEADACHE.

We desire to call attention to a simple, and at the same time wonderfully efficient, treatment for many kinds of headache. We lay no claim to originality, nor do we know who the originator was, but having used it for a year or more, and in many cases with remarkable results, we feel disposed to give it our endorsement, and desire to make it more generally known. The remedy is nothing more nor less than a solution of the bisulphide of carbon. A wide-mouth glass-stop pered bottle is half filled with cotton or fine sponge, and upon this two or three drachms of the solution are poured. When occasion for its use occurs the mouth of the bottle is to be applied to the temple or as near as possible to the seat of pain, so closely that none of the volatile vapor may escape, and retained there four or five minutes or longer. For a minute or so nothing is felt, then comes a

sense of tingling, which in a few minutes—three or four usually—becomes rather severe, but which subsides almost immediately if the bottle be removed, and any redness of the skin that may occur will also quickly subside. It may be reapplied if necessary, several times in the day, and it generally acts like magic, giving immediate relief.

We believe this was the basis of a once popular nostrum. The class of headaches to which it seems especially adapted is that which may be grouped under the broad term of "nervous." Thus neuralgic, periodic and hysterical headaches, and even many kinds of dyspeptic headaches, are almost invariably relieved by it. True, the relief of a mere symptom is quite another thing from the removal of its cause, yet no one who has seen the distress and even *agony* caused by severe and frequently recurring headaches (and who has not seen it?) but will rejoice to be able to afford relief in so prompt and simple a manner, besides it is sure to secure the hearty gratitude of the patient if he has suffered long. As to the *modus operandi* we have nothing more definite than a theory to offer, and that is that the vapor being absorbed through the skin produces a sedative effect upon the superficial nerves of the part to which it is applied. We know by experiment that its influence is not due to its power as a counter-irritant. We, however, know that it does act, and if we do not clearly see in what way it acts that is no more than can be said of several other remedies which are firmly established in professional favor and confidence.—*Physicians' and Surgeons' Investigator.*

THE BEST TIME FOR ADMINISTERING MEDICINES?

Before or after meals? Such is the question often asked of the Doctor, but the answer is not always ready. The *Midland Medical Miscellany* answers it as follows: Medicines that are irritating should be given after meals, when the stomach is full, viz: the salts of copper, zinc, iron, and arsenic, in large doses. Small doses, intended to act on the stomach terminals of the vagi, must be given when the organ in empty. Chemical reasons also have their influence, thus, oxide and nitrate of silver, intended for local action, should appear in the stomach during its period of inactivity, lest, at other times, chemical reactions destroy the special attributes for which these remedies are prescribed. Iodine and the iodides further illustrate this point. Given on an empty stomach they promptly diffuse into the blood, but if digestion is going on the acids and starch form products of inferior activity, and thus the purpose which they are intended to subserve is defeated. Substances prescribed to have alvine action on the mucous membrane, or for prompt diffusion unaltered, are preferably given before meals. The condition of the stomach veins after meals is such as to lessen the activity of diffusion of poisons, and hinders their passage through the liver. It follows that active medicaments in doses near the danger-line, are more safely administered after meals.

When shall acids and alkalies be given, before or after meals? First, as to acids. When acids are prescribed with the view to check the excessive formation of the acids of the gastric juice, they may be given before meals—as, by the laws of osmosis, they will determine the glandular flow of the alkaline constituents of the blood. The same reasoning would hold good when the alkaline condition of the blood is in excess; osmosis being favored, the acid would reach the blood more readily. Second, as to alkalies: these may be given just before meals, when the acid-forming materials in the blood diffuse into the stomach glands, and after digestion is completed, when the alkalies diffuse directly into the blood, without interference from the contents of the stomach. An alkali taken during the time when the reaction of the stomach juices should be strongly acid, must necessarily hinder, if not arrest, the digestive process for the time being. The metallic salts—notably corrosive sublimate, alcohol, tannin, and some other agents—impair or destroy the ferment, or digestive power, of pepsin. Wine that is intended to act as food is most beneficial when taken slowly during the course of the meal. The objection as regards the ill-effect of alcohol on pepsin, is not applicable here, except to the stronger spirituous wines in large quantities, for the ordinary medicinal wines do not have sufficient alcoholic strength to injure this ferment. Iron, phosphates, cod liver oil, malt, and similar agents should, as a rule, go with food through the digestive process, and with the products of digestion enter the blood.—*The American Medical Digest.*

A CLINICAL LECTURE ON GASTRO-DUODENAL CATARRH IN YOUNG CHILDREN.

By Joseph P. Oliver, M.D., Instructor in Diseases o Children.

[Delivered at the Harvard Medical School, Boston.]

Physicians in general practice are often called to see and prescribe for little patients who present the following symptoms: They are delicate-looking, and one is told that for some time past they have complained of languor and weariness, particularly after slight exertion. They appear to be bright and fresh enough in the morning, but as the day wears on they are apt to be dull, and disinclined to play. When the hour to be dressed and go to the park arrives, they do not care to go out, but prefer to stay at home. Usually good-natured and amiable with their brothers and sisters or other companions, they now become peevish and fretful, com-

plain of occasional headache, are restless at night, grind their teeth, have bad dreams, wake up suddenly in terror, and at times with pain in the legs. The appetite is capricious; to-day there is none whatever, to-morrow it may be voracious. After eating, they will frequently complain of pain in the region of the stomach and small intestine. The tongue is at times clean, and again it has a moist, milky coat, through which the papillæ show prominently. The tip and edges are usually clean, and not particularly red. The bowels may be constipated, or they may be so for a few days, and then a little loose, or the child may have a slight clay-colored operation daily for a week or ten days. The breath is at times very offensive. In the autumn or spring there is apt to be more or less follicular pharyngitis. Now, this condition of things persists till the child has what the mother calls a "bilious attack"—that is, headache, nausea, vomiting, and diarrhœa. The child is then in bed for a few days, and after that is a little better for a while, but in the course of a few weeks goes through with the same thing again. Occasionally there is a little cough; short and hacking during the day but loose in the morning. The temperature is never above the normal, unless the so-called "bilious attack" is protracted. Now, the foregoing symptoms go to make up what is called gastro-duodenal catarrh—an affection which, in my experience, is very common, especially in girls between the ages of four and twelve. Sometimes the symptoms are vague and indefinite. The patients do not have the explosive or so-called bilious attacks, and the patients do not seek advice until the condition of emaciation or a slight cough suggests the terrible name of phthisis. The symptoms often come under the head of that unscientific term, "general debility," and I am very sure that in children these symptoms mean nothing more nor less than gastro-duodenal catarrh.

The affection is often met with after some exhausting disease like pneumonia or typhoid fever; it may, however, occur without being preceded with any of these affections. I presume that during the fever the system in general becomes so exhausted that the digestive organs partake of or share in the general weakness. In these cases the appetite is at times voracious, and, if the child is allowed to indulge in it, the penalty for the indiscretion is generally pretty severe; an acute attack is developed with its train of distressing symptoms, such as pain in the head, nausea, vomiting, intestinal pain, and, perhaps, diarrhœa. As is well known, a child is not nourished by the bulk of food he takes into his stomach, but only by the food he can digest. In all children there is a constant tendency to acid fermentation of their food. This is very marked in feeble children; it may be due to their diet. The mucous membrane lining the intestinal tract is naturally active, and on the slightest irritation pours out suddenly and freely an alkaline secretion; if they have over-eaten, or if starchy food has entered too largely into the diet, fermentation is set up, and an acid is formed which stimulates the mucous membrane to further secretion. Now, this excess of mucus is the *fons et origo mali* under consideration, for it interferes with the digestion and absorption of food. As a result, the child is imperfectly nourished, land, from lack of nourishment, the symptoms of general debility, or, properly, in these cases, gastro-duodenal catarrh are developed.

As I before stated, the affection is more common in girls than in boys. With watchful parents some children seldom have the explosive attacks. The cases are less severe, but the child is half sick all the time.

During second dentition this affection is extremely common, and often mothers believe this process to be the occasion of the child's ill-health. Worms are also supposed to be the cause of the illness, and it is not surprising that mothers think so, for it is not unusual to find in these cases lumbrici or oxyuri. The excess or mucus which is secreted forms a favorable nidus for the development of the worm, and, consequently, the parasite is less a cause than the result of the disease.

The symptoms, then, may be briefly enumerated as follows: I refer to the subacute or chronic gastro-duodenal catarrh, not the acute affection. The so-called "bilious attacks" which occur in these cases are simply the affection rendered acute for a few hours or days, and need not be described in this lecture.

First, the child's appetite is capricious or fails altogether. He is constipated, and, perhaps, the constipation is followed by diarrhœa for a day or two. After this state of things has gone on for a time, he complains of feeling tired on slight exertion, is languid, indisposed to play. At times he is fretful and peevish, restless at night, grinds his teeth, wakes up suddenly with severe pain in his legs or in great terror. The child emaciates, the eyes are sunken and surrounded by dark rings. The skin becomes thin, harsh, and dry. There may be nausea and slight headache, with blurring of the eyes, and, in older children, muscæ volitantes.

Through all this the tongue may be tolerably clean, or it may have a light milky coat, with the papillæ showing through prominently, the latter fact being generally significant of digestive disturbance in children. The so-called "worm-tongue" may exist—that is, a tongue tolerably clean on the tip and edges, with a coating of shiny mucus in the centre. The tongue is seldom markedly affected. The breath is often very offensive, though foul breath may be due to the disordered stomach, or to buccal or pharyngeal catarrh.

The cough which may be present is due to either slight bronchial catarrh, follicular pharyngitis, or elongated uvula. You frequently find hypertrophied tonsils in these cases, and the decomposition of the thick yellow secretion will account for the foul breath. Earache is not at all uncommon in these cases. I believe that I have

before alluded to the occasional pain in the epigastric region after eating.

Now, having made a careful examination of the little patient, and having come to the conclusion that the symptoms are due to gastro-duodenal catarrh, having recognized the weakness of the digestive system, and having seen the evidence of defective nutrition, our indications for treatment are plain enough. We must increase the nutrition—that is, increase the supply of food, but, at the same time, we must be careful in our selection, as the fact that the digestive system is feeble must ever be before us.

Treatment.—First, the diet is to be arranged; as the tendency to fermentation is so marked in these cases, I eliminate the starchy foods as much as possible. You can not deny a child of from six to twelve years bread and potatoes altogether, but you can arrange an agreeable and varied diet, so that he shall get a minimum quantity of these articles. Many physicians believe that such cases would be benefited if oatmeal and cracked wheat should enter more largely into the diet; it is not so, however, according to my experience. It seems to me that oatmeal and cracked weath illustrate most admirably the old adage that "what is one man's meat is another man's poison." Particularly in the summer season should the oatmeal be interdicted. In these cases I generally order a cup of weak mutton, chicken, or veal broth, to be given to the child as soon as he wakes in the morning, before he gets out of bed even; a good-sized teacupful is enough; of course, it must be warm.

Then an hour or so later a little toasted bread or stale French bread. The crust of the long French roll is excellent, and children usually like it. With the toast or French bread may be given a cup of milk and a hard boiled egg chopped fine, to which may be added a little butter and salt, or, better still, a little cream, or, in place of the egg, a little broiled fish. Some children will object to the milk, and in such cases you will do well to prescribe Schweitzer's cocoatine, Cadbury's cocoa essence, or Fry's cocoa powder. Children, as a rule, like the cocoa or chocolate flavor, and do not object to the milk when so disguised.

At noon a dinner consisting of beefsteak, chop, a little bird, roast beef or mutton, not too much cooked, with meat gravy; but no made gravy or sauce is to be allowed. At night dry bread and milk. The broth, if not too rich, may be repeated at this meal. Some mothers think this a pretty limited diet, but you should vary it as much as possible, and give four or five small meals a day instead of three larger ones. As the excessive production of mucus in the stomach and intestines is to be overcome gradually and by constant efforts, I endeavor to attain this result in two ways: first, by diminishing the production—that is, by regulating the diet; and, secondly, by cleaning out the excess or over-production by means of cathartics regularly administered every third or fourth day.

As cathartics I use the aqueous tincture of rhubarb, liquorice powder (German), pil. rhei. comp., and occasionally the following powder: R. Calomel, 1 part; pulv. jalap. 2 parts; pulv. scammony, 2 parts. M. To be given in syrup.

In mild cases the following recipe has often done good service, obviating the necessity of the regular administration of a cathartic; ℞ Podophyllin, gr. j; alcohol, ʒ j. M. Five to ten drops on a lump of sugar morning and evening. The indications for this are constipation, clay-colored stools, and loss of appetite. I do not expect to get a cathartic action from the remedy, for if it produces, such an effect it must be used in smaller doses or abandoned altogether. It is to be given for two or three weeks, or even longer. Under its use I have seen the tongue clean, the appetite return and follicular pharyngitis disappear completely.

Under the above circumstances some physicians will order four or six grains of calomel; but as it is very unpopular treatment among many of the laity, I seldom employ it, particularly as other things seem to act as well. One word more in regard to the Podophyllin: If the patient should have two or three dejections a day, the dose must be diminished about one half. The good effect of the medicine is not seen for several days. After cathartics, alkalies are of next importance—the bicarbonate of soda or potassa, given in a bitter infusion, say cascarilla, chiretta, gentian, or columbo. If the mucous membrane generally is in a lax condition, to the foregoing bitter and alkali you may add a little tincture of myrrh. As it gives a disagreeable taste to the mixture (already disagreeable enough to the young patient), I would omit it from the prescription unless you consider that the patient really requires it.

The bitter is usually intensely disagreeable to children, and sometimes it is a difficult matter to get them to take it regularly; but if the mother understands the importance of the drug she will make the child take it. Tincture of nux vomica or liquor strychniæ are sometimes useful adjuncts to the bitter infusion. They, of course, render it still more bitter. The objection to syrup is obvious. La Bourboule water you will often find useful. This is a natural arsenical water which comes from La Bourboule, Auvergne, France. The arseniates play the most important part in this water, owing to the powerful action which they possess in a small volume and in a proportional large dose, as they are found in the Bourboule water; no other mineral water known contains so large a proportion. Now-a-days it is a favorite remedy with dermatologists; it is indicated in cases of gastro-duodenal catarrh where you find as a complication obstinate post-nasal and pharyngeal catarrh, and in patients who have the so-called herpetic diathesis, which shows itself by the familiar cutaneous lesions of certain forms of psoriasis, eczema, etc. It should be given warm, after meals, in quantities of one to three or four ounces three times a day, and should not be continued beyond

three weeks. Its administration may be resumed after a fortnight.

As the child improves, a little iron may be added to the treatment, but of the milder forms and in very small doses. A little later many children bear cod-liver oil well. Wines, such as dry sherry or good claret, may be given with dinner. Baths are a useful adjunct to the treatment—I mean sponge-baths.—*New York Medical Journal.*

ARSENIC AND DIGITALIS IN PHTHISIS.*

By A. Jacobi, M.D.,

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Many a case of phthisis, or rather many a case of pulmonary affection known to terminate in phthisis under most circumstances, heals spontaneously or remains dormant. At least we have reason to conclude so when of a number of cases with the same physical symptoms one or more never develop into phthisis, while the others run their complete courses. As the proofs of incipient phthisis we consider catarrh of the apices, which is always attended with the presence of broncho-pneumonic deposits, of either recent or old date, so old, indeed, they may be, that the history of their development dates back to infancy or childhood. Many cases of broncho-vesicular respiration over the upper, usually right lobe, diminished respiration, slightly bronchial expiration, moderate amount of dulness on percussion, and retraction of the supra or sub-clavicular region are the results, quite often, of a single attack of well-remembered inflammatory disease. Add to this a flat chest, prominent shoulders, known hereditary disposition, persistent anæmia, and constitutional debility, tendency to catarrh and occasional slight cough, and your diagnosis of incipient phthisis leaves nothing to be desired. But this condition does not necessarily lead to pulmonary disintegration and general consumption, but may remain stationary, and even improve to such an extent that the physical symptoms become more normal, the subjective symptoms easier, and the weight increase.

If that be true, and known to be so by every practitioner, if spontaneous recovery may take place, why, the inference is that—this spontaneous tendency being given—recovery is the more possible and probable under the influence of well-directed medicinal and dietetic treatment.

Caseous deposits, both glandular and pulmonary, are often found in post-mortem examinations where death had occurred from some disease not connected at all with pulmonary disease, in an inert condition; they meant nothing else during all the period of their existence but so much less respiring area. Practically that is phthisis retarded or stopped in its progress. Even repeated attacks of broncho-pneumonia, with deposits leading, generally, to consumption, will finally cease, fever and cough will disappear, the general health will improve, and the lungs be in a sufficient condition for practical purposes.

It is only the last stage, when abscesses form, pus will be expectorated, the blood get deprived of albumen, blood-cells become diminished in number, oxygen not be admitted in sufficient quantity because of the scarcity of blood-cells, assimilation be impaired and weight reduced by perspiration, diarrhœa and sleeplessness—and when finally pus will be absorbed—that the chances of recovery become less. Hectic, like every other pyæmic fever, is apt to lead to death. But even such cases have been known to improve, or recover.

The treatment has to vary according to the stage; the period of gradual preparation, that of inflammatory action, that of pyæmic fever, have their several indications. It *has* frequently varied in accordance with the theories held concerning the nature of the disease. There were those who took *every form* of phthisis for a nutritive and dietetic disorder, those who saw in it a species of inflammatory disease in different shapes and degrees, those who looked upon *every* case and form of phthisis as an infectious disease either of chemical, or, as modern bacteriomania will have it, of parasitic nature. These different forms have their different indications for medical treatment.

On the effects of arsenic Isnard wrote a book in 1867. He administered arsenic mainly in malaria and phthisis. In both he explained its usefulness by its effect on the nervous system. He claimed that suppuration, debility, emaciation, vomiting, diarrhœa, and constipation would improve or disappear by it. The doses of arsenious acid used by him amounted to one centigramme (one-sixth of a grain) up to five centigrammes daily.

If there be any medicine which, besides quinine and mercury, has been called a specific in many diseases, it is arsenic. It is known to act as a poison, and a strong caustic. It prevents putrefaction, though, as a real antiseptic, it ranks even below salicylic acid. It acts very favorably in malaria, chronic skin diseases, maladies of the nervous system, and has considerable and sometimes unexpected effects in the treatment of lymphoma, even lymphosarcoma. In small and frequent doses it improves connective-tissue growth, it thickens the connective tissue of the stomach, and increases periosteal and osteal deposits. In the latter respect it is surpassed only by phosphorus, on the curative effects of which in subacute and chronic bone diseases I read a brief paper before you a number of years ago.* It is also said to improve the sexual desire and power, and the physical courage of animals. Thus there is a variety of effects, the uniform

* Read before the Medical Society of the State of New York, February 7, 1884.

cause of which remains to be found. It can be traced back only, it appears, to the action of the drug on the cell. It is true that the different organs mentioned have cells of different structure, appearance, and function. But in regard to their nutritive processes the different varieties do not differ at all. At all events oxygen acts on all of them in the same manner, albumen is absorbed by them all, and osmosis regulates their circulation equally.

The increase of cell growth in all the tissues mentioned points to the mode in which arsenic must develop its action. It cannot accomplish what it is known to do without local stimulation and irritation, which, when moderate, improves growth, when exaggerated (by large doses or in predisposed persons) leads to granular degeneration.

Arsenious acid, when in contact with the constituents of the living organic cell, is oxidized up to arseniate acid. This is often reduced again to arsenious acid. Based upon these observations, Binz and Schulz† have advanced the theory that the cells are kept in a constant condition of irritation by these changes, which involve an equal variability in the conditions of the atoms of oxygen. Tissues endowed with a rapid metamorphosis must necessarily be affected more than others, and those in which the effect of the drug is mostly developed may be destroyed by degenerative processes, while a moderate effect results in irritation only. To accomplish this, it is immaterial whether arsenious acid acts as such or in some chemical combination. Its action, as long as it is restrained within certain limits, has been utilized by Hans Buchner‡ for practical and theoretical purposes. The former consists in its administration for phthisis, the latter in the attempt to fortify the bacillus theory. In his belief phthisis can be prevented by keeping out the bacillus. This is done by stimulating and gently over-nourishing the cells, and thereby increasing the power of the organism to resist the invasion of the bacillus enemy. His theory is more shaky than his results, He relies on arsenic as his main medicinal resort in phthisis, and finds fault in Isnard only because of his using arsenic for curative only, and not for preventive purposes. In this remark lies the explanation of the effect which I claim myself also.

Consumption is almost always of long duration. The same nutritive disorder, the same inflammatory attacks recur frequently during the different stages. Besides the original dispositions, there are, then, many attacks, every one of which can and must be treated when perceptible, or prevented before they fully develop. If such prevention be thorough, phthisis will remain dormant. That effect is accomplished by rational dietetics, climatotherapy, and finally by arsenic. I know it has been used formerly in that diseased condition called consumption, but the reporting of new experience does no harm. Besides, where two do the same thing, it is not the same thing after all, and the method of administration is more important than the fact of administering it. Under the permanent use of arsenic the infiltrations diminish, elastic fibres disappear from the expectorations, the strength improves, and the weight increases. Of this result I have convinced myself in a great many cases while they were in the incipient stages.

Trousseau and others recommended arsenic, in chronic pulmonary catarrh and asthma, in the shape of cigars. The indications in many cases are correct, the method of administration is very much less so; for there is no remedy the doses of which are less subject to, and tolerated in such uncertainty, as the smoking of arsenic cigars would imply.

Small doses of arsenious acid do not interfere with the efficiency of saliva, and gastric and pancreatic juice,* nor is the stomach itself affected by it. In some cases there is a slignt sensation of pain or hunger, the result of which is increased appetite, and ingestion of food. However, as this larger amount of food is not followed by indigestion, the powers of the stomach must be presumed to be increased. Undoubtedly innervation of that organ is improved. For this reason only, the general nutrition is improved also. This effect is so well known to farmers and veterinary physicians that animals are supplied with arsenic for the purpose of strengthening and fatting. Its use among miners is well known. In many cases of anæmia it is the best alterant and nutrient.

Hans Buchner asserts that the incipient stage is not the only period in which arsenic proves effective. That is true. It has the same, or rather a similar beneficial effect in the later stages. But he claims that complete recovery has been accomplished in the most severe cases, that perspiration and fever will cease, the pulse become less frequent and stronger, and the vital capacity increase even in far-advanced cases. This I believe to be overdrawn. Particularly in regard to the hectic fever I have almost always been disappointed. I believe that even digestion was not at all improved by arsenic in that stage. Thus it has become my rule not to prescribe arsenic at all while the fever is high, but to begin or return to it as soon as the tempture has a tendency to become normal.† When I acted on that plan I had very often the satisfaction of improving the condition of very doubtful and far-advanced cases.

* Transactions, 1880, p. 310.

† Arch. f. exper. Pathol. u. Pharmacol., xi., xiii., xiv., xv.

‡ Die aetiologische Therapie und Prophylaxis der Lungentuberculose. 1883.

* Erich Harnack: Lehrb. d. Arzneimittellehre, p. 482. 1883.

† In the discussion following the reading of these remarks Dr. Drake gave expression to his favorable experience in regard to the value of arsenic in the fever of phthisical patients.

The doses ought not to be large. Nausea, colic, diarrhœa, œdema of the eyelids are contra-indications to the continuation of its use. One-fifteenth, or one-tenth to one-sixth of a grain of arsenious acid, daily, is a sufficient dose for an adult if it is to be continued for a long time. In order to render it less liable to give rise to disagreeable symptoms a little opium may be administered with it. In most cases of incipient phthisis this combination is pleasant and useful. In such as show intestinal symptoms at an early period, its joint administration is a particularly happy one.

Still it may be remembered that gastric symptoms, attending the use of arsenic first, will be apt to disappear soon.

The preparations I use are either arsenious acid or Fowler's or Pearson's solution. The former it is best to give as a pill, in such combinations as I shall allude to shortly. Fowler's solution, three drops, or Pearson's solution, six drops, three times a day, in a few ounces of water, administered after merls, and gradually increased, will act favorably. In but few cases the former had to be exchanged for the latter, because of the intolerance of the stomach.

In connection with the above remarks I venture to submit a few words in regard to another remedy which I believe to have been beneficial in a great many of my cases. Again I have no new remedy to advise, but desire to state that an old one has, in the course of three decades, aided me much in relieving my patients. If I speak of as a trite a drug as digitalis, I may be permitted to add, that while nothing that I say may appear new, it has seemed to me as if from year to year I learned better how to use it.

In the vertebrate, digitalis increases the energy of the heart-muscle and the volume of its contraction. Thereby it increases arterial pressure and diminishes the frequency of the pulse. In this connection it is of no consequence whether the irritation of the inhibitory nerve is the primary or the secondary element. By increasing the pressure in the arteries, besides favoring the secretion of the kidneys, it improves the pnlmonary circulation, empties the veins, and thereby accelerates the circulation of lymph and the tissue fluids. Thus, while having an immediate effect upon heart and lungs, it exerts a powerful influence on the metamorphosis of organic material, assimilation and elimination, that is, nutrition in general.

Thus both the local and general effect of digitalis are invaluable in all, stages of phthisis. While, however, they may relieve in the last, they are a healing element in the first stages. The congestive and nutritive changes constituting the preparatory, and, in part, the advanced stages of consumption, are favorably influenced. I seldom treat a case of phthisis without it. Very little care is required to avoid disagreeable results. Cumulative effects are either the consequences of excessive or too frequent—unnecessarily frequent–doses, or of the selection of improper preparations. Such as are soluble in water with difficulty only, ought not to be used, for it may happen that, having been inert for some time, a large amount may enter the circulation at once. Particularly is this true of digitalia, which is by no means a soluble alkaloid, but a crystallizable glycoside. I use the infusion, the tincture, the fluid extract, the extract. Their relative values I do not desire to discuss, except in regard to their advisability in phthisis, and the possibility of continuing them for a long time. Patients of that class we see from time to time only; they require advice and prescription for a protracted period; as a rule, their digestive organs are among the first to suffer; indeed many an alleged dyspeptic patient is effected with gastric disturbances first, and has his attention drawn to the lungs by his physician, who discovers the cause of his gastric catarrh in the retarded circulation of heart and lungs. In this case the stomach exhibits the peripherous symptoms of the distant diseased organs in the same manner in which a local disease of the brain or cord shows itself first, in affections of peripherous nerves. Now, whenever the stomach is much affected, neither the tincture nor the infusion is tolerated long, The latter may be given in three daily doses of a half a tablespoonful each, or in two,of three teaspoonfuls each, for some time. But I seldom risk to recommend it for more than five or six days in succession without seeing the patient. The fluid extract has often disappointed me, I cannot tell why, nor do I claim to know why. What I mean to report is merely my experience. My main reliance is on the extract; my almost universal method of giving it is in the form of a pill, in such combinations as will suit the individual case. The stomach does not object to it, taste is not offended by it. I often prescribe one and one-half to one and three-fourths of a grain, corresponding with three and a half times its weight of digitalis, for weeks, without expecting to see the case again. It combines with extr. nuc. vom., with iron, with arsenic, with quinine in small doses, with extr. belladonna or extr. calabar, with coloc. cmp., in fact, with anything, Such combinations are frequently required in the early stages of consumption. The general muscular sytem requires toning up, the intestinal muscle requires strengthening, the intestinal tract evacuasion, the intestinal and abdominal circulation easing. At the same time iron, as I mentioned, may be added, when there is no fever; or caffeine, for its stimulant effect on heart and arteries.

Speaking as a general practitioner before a meeting of almost exclusively general practitioners, I desire to add, in this connection, a single remark on the general usefulness of digitalis in other cases. Every chronic disease, and the results of the wear and tear of what is called civilized life,has a depressing influence on all parts of the organism. The heart is not the last to suffer. Its muscular strength is tasked every second, it is the very organ which cannot and must not rest. Stagnation in an outlying province will over exert it, ill nutrition of the

nerves will influence it, general anæmia exhaust it, infection paralyze it, weak circulation or venous obstruction interfere with its structure and strength. Now what alcohol and ether are to the nerve, strychnia to the muscle, that is digitalis to the heart unless in a condition of myocarditis. The increase of arterial pressure it produces is beneficial not only to outlying provinces, it is so to the circulation and nutrition of the heart-muscle itself. Thus in all cases of general anæmia, in slow convalescence, where iron and nux are called for, digitalis is also required. It strengthens the heart, propels the blood in its own fibres, and shortens the period of recovery. I have learned to look upon digitalis for restoring vigor and strength, as more than a mere symptomatic ; I consider it to be one of the best tonics, along with iron, nux, and arsenic.

MELLIN'S FOOD.

Prof. Dr. R. Fresenius, Wiesbaden, Germany has made an analysis of Mellin's Food for Infants and Invalids, of which the following is a summary :—

Total carbohydrates	72.56
albuminoids	9.75
salts	4.37
moisture	13.32
	100.00

Starch and cane sugar, none ; reaction, alkaline.

A copy of the detailed analysis and remarks of this first chemist in the world may be had by application to Messrs Doliber, Goodale & Co., 41 and 42 Central Wharf, Boston, Mass.

NEEDLESS, USELESS COUGHING.

There is in the world, says Charles J. Hare, in *Brit. Med. Journal*, a great deal of what I am accustomed to call "needless, useless coughing."

Where secretion takes place in the bronchial tubes, it must sooner or later be brought up ; coughing must take place, or the patient will choke. But, both in organic diseases and in slight inflammatory or irritative affections of the air passages, there is often an immense amount of useless coughing—unless, that is, as regards bringing up any laryngeal or bronchial secretion, and far worse than useless, because it wears out the patient, prevents sleep, and, moreover, increases the condition which gives rise to it, inasmuch as it lets the affected parts have no rest or peace. Now the effects of opium are both local and general ; and in mucilage of acacia, or tragacanth, or in glycerine, or with a thick solution of confection of rose, or honey, you give frequently from the one-fortieth to the one-twentieth of a grain of morphia, you not only give a marvelous amount of peace and comfort to the patient, but, where it is remediable, you tend also to cure the disease. A favorite formula of mine, varied according to circumstances, is :

℞	Acetate of morphine	1 ½ grs.
	Nitric acid, dilute	1 ½ grs.
	Oxymel of squill	6 grs.
	Mucilage of acacia	2 ½ ozs.
	Glycerine	2 drs.
	Syrup of red poppy	2 ozs.

Cinnamon or rose water sufficient to make the whole equal 6 ounces.

M. To take one or two teaspoonfuls five, six or seven times in twenty-four hours.

The coughing in pertussis may be similarly relieved.—*The Cincinnati Lancet and Clinic.*

HOW TO CLEANSE AND BLEACH SPONGES FOR SURGICAL OR GYNÆCOLOGICAL USES.

Dr. L. Curtis in the U. S. *Med. Investigator* says : Having made the sponges free from sand and calcareous matter by gently beating them, wash them in water, squeeze them as dry as possible and then place a few at a time in a solution of *Permanganate of Potassa*, made by dissolving one hundred and eighty grains of the salt in five pints of water, and *pouring a portion* of the solution into a clean glazed vessel. Let them remain a few moments until they have acquired a dark mahogany-brown color, when they are to be squeezed by hand to free them from the solution. They are then dropped a few at a time into a bleaching solution made as follows : Hypo-sulphite of soda, ten ounces ; water, sixty-eight fluid ounces ; when dissolved, and five fluid ounces of muriatic acid.

This solution should be made the day before being wanted for use in order that the sulphur precipitated by the acid may be easily separated. This solution is poured off from the sulphur, and, if necessary, is strained through muslin into a glazed vessel. The sponges are allowed to remain in this solution a few moments, squeezing them with the hand occasionally in order that every part may be reached by the fluid, then squeeze out and wash through several waters to rid them of the sulphurous odors. They may be completely deodorized by washing them in a weak alkaline solution of *Bicarbonate of soda*, about one hundred grains to the pint, and then washing through several waters to free from any traces of the alkali. Much caution must be used in this last operation, lest the bleaching effect of the previous solutions be partly neutralized. When the sponges are *nearly dry*, immerse them into a solution of glycerine water, one-half ounce to the pint, squeeze them as dry as possible, and dry them in the shade—be sure and not let direct sunlight on them until dry. They will be as soft and white as wool.

DIARRHŒA IN CHILDREN.

Dr. Lees, in his paper in the *Med. Times and Gaz.*, May 3, 1884, calls attention to a class of cases, not very uncommon in children, in which the main symptom is an irresistible impulse to defæcation, experienced almost immediately after food has been taken. Colic pain may, or may not, be present, but there is no sensation of weight at epigastrium, heartburn, flatulence, or other symptom of dyspepsia. The motions are usually semi-solid, not often watery or slimy, and frequently contain undigested food. Usually a motion is passed almost immediately after every meal, and perhaps once or twice more during the twenty-four hours. Dr. Lees points out that these symptoms are evidently due to a hyper-peristalsis of the alimentary canal, without increase of secretion, the two factors of ordinary diarrhœa being here disassociated. Such increase of peristalsis, is probably due to irritation of the vagus nerve, which supplies the exciter fibres to the intestine, the splanchnics conveying the inhibitory fibres. The proximity of the nucleus of the vagus to that of the trigeminus, in the medulla, indicated the possibility that this increased excitability of the intestine may in part be due to dental irritation, the cases in question usually occurring during the period of the second dentition. Believing in the purely neurotic origin of the symptoms, Dr. Lees has treated several cases with bromide of potassium simply, without opium or any astringent, and had obtained immediate success, even in cases which had persisted for several months. The diarrhœa was usually arrested in a few days, and occasionally the children became so costive that the medicine had to be discontinued. Four cases were narrated, also a similar case occurring in an adult, in all of which speedy relief was given by bromide. In conclusion he remarks that individuals who suffer from these symptoms are often of a markedly neurotic temperament, timid, and easily frightened.

THE MILK-TREATMENT OF DISEASE.

In a rather extended experience with this treatment Dr. Tyson [*Journal American Medical Association*] has met with encouraging results in the following conditions:

1. In diabetes mellitus he has found no measures so efficacious as the dietetic and, of the dietetic, none so prompt as the exclusive skimmed milk regimen. The milk gives the crippled organs, especially the liver, more complete rest than any other food, thus allowing "the reparative tendency of nature to assert itself."

2. In certain forms of calculous disease. He has yet to see a case of uric acid gravel in which, sooner or later, the persistent use of milk did not cause entire disappearance of the deposit. He found signal benefit from it in a case of nephritic colic. It may also obviate the oxalate of lime tendency, but will not dissolve the deposit. In phosphatic calculus it is rather contra-indicated because it has a tendency to alkalinize the urine.

3. In Bright's Disease it has accomplished good. It is especially indicated in the contracted kidney of interstitial nephritis, causing frequently a rapid disappearance of nausea, vertigo, headache and other symptoms. In paren-chymatous nephritis and in amyloid kidney it has proved less useful, but often does good by "producing diuresis and relieving dropsies."

4. In gastro-intestinal disease, ordinary dyspepsia is sometimes signally relieved. In gastric ulcer, the use of no other food than peptonized milk should be permitted. We may expect "the most satisfactory results" from its use in bowel affections, especially of large intestine.

5. In obesity it has given most satisfactory results, reducing its weight consistently with health. It seems to do this by making the system call upon its stored-up subcutaneous fat for oxidizable material, the milk furnishing very little of this itself.

To sum up: milk is highly useful in disease, especially those mentioned, because it is non-irritating, leaves little waste, and makes the smallest demand upon the digestive function. Skimmed milk is preferable in diabetes and some other affections, because it is more assimilable than milk with cream. Some objections to its use have been urged, as that it sometimes causes indigestion, flatulence and constipation. The addition of lime water will do away with the first two objections, a mild laxative will obviate the latter.

The milk is to be given as follows: Four ounces every two hours from 7 a. m., to 9 p. m., at first. This, of course, will be insufficient. It is to be increased afterwards to six, eight or more ounces every two hours, until the quantity is from five to ten pints in two to four hours, according to the needs of the patient. The quantity may be increased by giving some at night. After a varying time other food may be tentatively given until it is found that it does not cause symptoms to reappear.

STOMACH-WASHING FOR DYSPEPSIA.

The practice of treating patients suffering from chronic dyspepsia, who resist the influence of regulated diet and of drugs, by washing out the stomach, which originated some years ago in Vienna, forms the subject of a paper by Dr. W. B. Platt, in the *Maryland Medical Reporter*. We are there informed that cases most intractable to all other treatments have quickly yielded to this means. The principle underlying the treatment is to keep the stomach clean, and, so far as is possible, at rest, for a time sufficient to allow of its complete recovery. The operation should be performed in the morning, before breakfast. A soft, red rubber tube is passed gently down into

the stomach quite, to the pylorus; with this is connected about a yard of common flexible tubing and a glass funnel, which is held on a level with the patient's breast, and tepid water is poured slowly into the funnel, until a sensation of fullness is experienced; the funnel is then depressed to the level of the waist, and the fluid allowed to syphon out. The process is repeated until the water returns quite clear. The washing should be repeated every day for a week or ten days, and during that time the diet should be restricted to milk or a little meat; then the washing may be done every second or third day, and finally abandoned at the end of three weeks. The advantages claimed for this method are that it is efficacious, simple, and safe, and it certainly is worth a trial in intractable case of chronic dyspepsia,—a disease which makes its victims a burden to themselves and their friends, and hitherto has brought but little credit to physicians.

TREATMENT OF HYDROCELE BY INJECTION OF CARBOLIC ACID.

Extracted from a Clinical Lecture delivered by PROF. S. W MOSS.

This plan originated with a physician of Tennessee, whose name I do not recall, some ten years ago, and it has been popularized by Dr. Levis, of this city. The method of applying carbolic acid is as follows: the fluid having been drawn off with a trocar, one drachm of the acid, rendered fluid by the addition of a minute quantity of water or glycerine, is injected into the sac by means of a rubber syringe provided with a nozzle long enough to reach through the canula. The canula and syringe are then removed, and the scrotum manipulated so as to bring the agent in contact with every portion of the serous surface. There is, at first, a little pain, but this is soon followed by numbness or anæsthesia. The patient may walk around for twenty-four hours, but he must then keep to his bed, with the scrotum supported by a proper bandage. This plan is said to be very efficient, and not liable to be followed by relapse.

Dr. Levis, who has had a large experience with it, records an almost uniform, if not entire, success. Other surgeons have not met with equally good results. In a case which I treated in this hospital some time ago, the injection of carbolic acid was followed by large effusion of blood into the sac of the tunica vaginalis, which resulted from the erosion of the serous membrane and the loss of support of the underlying vessels. The blood was evacuated and the patient recovered. I have not done the operation very often, but I have met with this complication on two occasions.

Before introducing the trocar, it should be mentioned that the scrotum is to be smeared with cosmoline, so that if any of the carbolic acid should fall upon the skin it will not produce excoriation."
—*College and Clinical Record.*

BENZOATE OF SODIUM IN THE SUMMER DIARRHŒA OF INFANTS.

The *Bulletin General de Therapeutique* quotes from the *Gazzetta degli Ospitali* a summary of an article, by Dr. R. Guaito that originally appeared in the *Rivista Italiana di Terapia de Igiene*, in which the summer diarrhœa of infants is considered as a zymotic disease produced by a special microbion introduced from without or developed during intestinal digestion, dietetic errors, defective hygiene, and excessive heat being the predisposing causes. On this theory, Kapuscinsky and Zilewiez employed benzoate of sodium for the vomiting and diarrhœa of infants, but in conjunction with subnitrate of bismuth. Guaita has made use of the benzoate alone in fifty-three cases of children between six months and two years of age, in thirty-five of which the affection had lasted from twenty-four to thirty hours, and in the eighteen others from six to fourteen days. In the first category, a cure resulted in every instance within forty-eight hours, in the second, after an average period of twenty-one days. Not a single death occurred. After a purgative (calomel or jalap) the author gives from four to six grammes of the benzoate, in 100 grammes of water, in the course of twenty-four hours, and continues the treatment for two days. On the third day, a gentle purgative is given (magnesia or manna), and the use of the benzoate is resumed. At the end of two days more improvement in the passages is constantly observed, they are no longer fœtid, and the vomiting ceases. During the treatment the diet is strictly regulated, and the child drinks nothing but lemonade and a few teaspoonfuls of wine; milk and broths are absolutely proscribed, but nurselings are given the breast not more than four times in the twenty-four hours. Other drugs may be given to meet special indications.—*N. Y. Medical Journal.*

BROMIDE OF ARSENIC.

Is easily prepared from Fowler's solution by cautiously dropping bromine into the solution shaking, letting the effervescence subside each time before adding more bromine. Continue to add the bromine to just up to the point when the solution begins to color and have the pungent odor. Bromine of arsenic is a valuable remedy in many nervous disorders, as well as being a potent alterative. It is also used successfully in diabetes mellitus and mitral disease of the heart. It does not cure the vulvular disease, but removes all, or nearly so, the distressing symptoms and suffering of the patient and makes life tolerable. We have used a great deal of bromide of arsenic prepared as per above, and have everything to say in its favor.

THE CANADA MEDICAL RECORD

A Monthly Journal of Medicine and Surgery.

EDITORS:

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SUBSCRIPTION TWO DOLLARS PER ANNUM.

All communications and Exchanges must be addressed to the Editors, Drawer 356, *Post Office, Montreal.*

MONTREAL, JULY, 1884.

THE PROTESTANT INSANE ASYLUM.

For some months public attention has been prominently directed to the working of the Lunacy Regulations in this Province. So much dissatisfaction has been expressed with the existing order of things that an active movement has been started by some of our prominent citizens to establish an asylum for the Protestant insane, somewhere in the vicinity of Montreal. It is unfortunate, however, that the question has been allowed to assume such narrow limits, when the wider and more important subject of the treatment and management of the insane in general in this Province needs such careful and earnest consideration. In this, as in many other respects, the Province of Quebec is half a century behind the times; such institutions as Beauport and Long Point asylums might have passed muster fifty years ago, now they are simply a disgrace to the intelligence of the Province and the capacity of its legislators. Asylums for the insane are no longer regarded by intelligent communities merely as prisons for the restraint of dangerous lunatics, but as special hospitals for the treatment of certain forms of brain-disease which are amenable to early and judicious treatment in a large percentage of cases. Public opinion in Great Britain has revolutionized insane asylums there; the Bedlams of olden times with all their horrors have been swept away; cruelty and violence have been replaced by kindness and gentleness; and to-day, in many of the largest asylums, locks and bolts, straight jackets and padded rooms are unknown. In the United States and Ontario similar improvements are being rapidly made. In Great Britain, the United States and Ontario, the large asylums are supported by Government, the most accomplished alienists placed in charge, and every facility afforded for the proper treatment and management of patients; while, at the same time, government inspection is thorough, and the management always open to public and professional criticism.

Now how do we manage things in the Province of Quebec? At Long Point the Government farms out its lunatics to a community of nuns, at so much per head per annum! There is no competent resident Medical Superintendent to receive, classify and discharge patients, and to prescribe, direct and supervise their treatment. The Government Visiting Physician admits and discharges patients and looks after the hygienic conditions of the place, but he does not reside in the institution, nor has he any power or authority as regards treatment. A medical staff consisting of a superintendent and three assistants would scarcely do justice to the patients now confined in Long Point Asylum. The institution may be a model of neatness, and the sisters may be kindness itself to those under their care, but that does not justify the system. Under present arrangements Long Point is chiefly used as a place of restraint, and fails utterly in fulfilling its more important function—judicious medical treatment. Beauport is in a somewhat similar condition.

Seeing the utter inadequacy and inefficiency of the present system, several philanthropic Protestants have bestirred themselves to find a remedy, and are now proposing to establish an asylum for the Protestant insane, conducted upon a rational basis and securing for its patients the advantages of modern improved methods. All honor to these kind-hearted men for their good intentions; but are they not on the wrong track? It would not only be a very costly undertaking to secure a proper site and erect suitable buildings, but far more costly to run it efficiently afterwards. Being a strictly sectional institution, it would depend for its support upon the liberality of the Protestant public,—a liberality strained to the utmost by the numerous charitable schemes now in existence. If, after a time, enthusiasm declined and subscriptions fell off, expenditure would require to be cut down, probably by diminishing the staff or by replacing assistants who are expensive but efficient,

by others cheaper but inferior. Such a course would be fatal to success. When, however, an asylum is maintained by Government there is no inducement to economise by providing inferior or insufficient attendance, while strict government inspection affords an additional guarantee that no such deterioration in service will be permitted. The success of an insane asylum depends largely upon two things—first, liberal pecuniary support, and, second, the free untrammeled action of a judicious medical superintendent. No matter how perfect all other arrangements may be, unless a thoroughly competent medical man is at the head of affairs, and unless he be protected from meddlesome dictation, the efficiency of an asylum will be surely impaired. The thorough equipping and successful running of a Protestant asylum would, we fear, be impossible at the present time. Besides the matter of expense, there are other and stronger objections to the proposed scheme. Why raise sectional distinctions in such an important matter? Even suppose the Protestant minority to be by this scheme comfortably provided for, what is to become of all the others? Are the Catholic majority to be left as they are? Are they not quite as much in need of judicious medical treatment as their Protestant brethren? Are our Protestant philanthropists to be content with rescuing only their own co-religionists from the results of ignorance and mismanagement? Is there any more reason why Protestants and Catholics suffering from brain-diseases should be separated from each other, than Protestants and Catholics suffering from other forms of disease? If difference in creed necessitates separation in the case of the insane, it should, with equal reason, necessitate separation in the medical and surgical wards of our general hospitals. Unfortunately, in the Province of Quebec, the dividing lines of creeds and nationalities are too strongly marked—we do not fuse—we do not co-operate—consequently all are weakened and general progress retarded. Can we not in this matter sink sectionalism and make a determined effort to place ourselves abreast of the times and wipe off the disgrace which at present attaches to us? It has been suggested that Dr. Workman of Toronto and Dr. Bucke of London be consulted respecting the choice of a suitable site for a Protestant asylum. Why not go further? Petition the Government to appoint a commission of the leading alienists of Canada to investigate the working of the Lunacy Regulations in this Province and report such amendments and alterations as they deem advisable. Such a commission should at least include the names of Dr. Workman and Dr. Clarke of Toronto, Dr. Henry Howard of Montreal, Dr. Bucke of London, and Dr. Vallée of Quebec.

CANADA MEDICAL ASSOCIATION.

The next annual meeting of this association takes place in Montreal on the 25th of August, and promises to be the largest and most successful gathering of its members since its formation. As the meeting of the British Association will take place immediately afterwards, and as many of the members of the latter are distinguished medical men from England, it is expected that these visitors will also be present and take part in the discussions. It is also the intention of the profession in Montreal to give a dinner to which all medical visitors, both English and Canadian, will be invited. Delegates from sister associations in the States are also expected, so that a brilliant gathering may be expected. In the absence of the general secretary, Dr. Osler, the functions of the office are performed by Dr. James Bell, of this city, who will supply all information and give certificates of membership to any who may wish to take advantage of the reduced travelling rates allowed to its members. A large number of papers are promised, and the lists will no doubt be extended beyond those already known.

WHERE IS IT?

We notice an advertisement in the New York Medical Record, announcing a medical agency said to be in existence in this city and conducted by Dr. W. H. Mercy. As we are in ignorance of the whereabouts of this establishment and of the professional gentleman named, it may be inferred that the usefulness of the agency cannot be very extensive. Correspondents are requested to send particulars, *with stamp enclosed.* Further remark is unnecessary.

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THE CANADA MEDICAL RECORD.

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CANADA MEDICAL ASSOCIATION.

The seventeenth annual convention of this association was held in Montreal August 25th and following days. There was a very large attendance of medical members from all parts of the Dominion and also of the medical gentlemen from England, members of the British Association. Dr. Mullin, the retiring president, opened the proceedings by introducing the president, Dr. Sullivan, of Kingston, who then took the chair. The following gentleman, together with the ex-presidents, were invited to seats on the platform : Dr. Brodie and McGraw, delegates from the United States, and Mr. Samson Tait, F.R.C.S., of Birmingham, England. Dr. Hingston, chairman of the Reception Committee, extended a hearty welcome to members from other points and invited all to a complimentary dinner which was given by the medical profession of Montreal on the following evening. The secretary having read the minutes of the previous meeting the following reports of committees was received :

Dr. Fulton, chairman of the Committee on Necrology, reported that there had been thirty-six deaths in the profession during the past year, some of whom were ripe in years, and some only entering the threshold of life. The medical population was estimated at between 3,500 and 4,000, so that the death-rate could not be said to be high. It might be that all the deaths were not reported, but, assuming them to be forty-six, or even fifty, and considering the hardships incidental to the profession, especially in a sparsely settled country, the rate was still low. Then followed a list of the names of deceased members, prominent among which were those of Dr. Reddy and Dr. Trudel, of this city. The report was adopted unanimously.

Dr. McCammon not being present, there was no report from the Committee on Education.

In the absence of Dr. Canniff, the secretary read the report of the Committee on Climatology and Public Health. The committee has had under discussion since last December the advisability of forming a Dominion Board of Health. Dr. Harding, of St. John, N.B., had drawn up a scheme which would be simple and inexpensive, and which was in substance as follows :—The name of the organization to be the Dominion Health Institute, and to be an institution under the patronage of and supported by the Federal Government. The object of the Institute to be, first, to obtain information from all possible sources ; and, secondly, to provide for the diffusion of all information obtained, which, after being sifted, would tend to effect the definitely stated ulterior object of educating all the people, as far as possible, in health matters. The outline of the plan was as follows :—" A general Board of Health to be appointed, to consist of (1) professors of hygiene of all colleges of Canada ; (2) medical men and laymen versed in public health matters ; (3) local provinces, selection to be made on some suitable ground ; (4) president and secretary to be paid, but no others ; (5) an annual report ; (6) number of members to be considerable ; (7) medical men to be a majority ; (8) bureau to meet once a year ; (9) an executive or council to meet oftener." As a provision for securing efficient working it was suggested that there should be

selected from among ordinary members in some suitable way, or therefrom by government appointment, a certain number as an executive of the health institution and called the Council. This scheme had been submitted to the members of the committee, and nine out of twelve of them had replied. None of them had dissented, and some had expressed their warm approval. The chairman had been in communication with Hon. Mr. Pope and Mr. John Lowe, and any suggestions the association would make would receive every attention at their hands. The institution would be supported under the patronage of the Dominion Government, for the purpose of diffusing information and educating the people. This was almost its sole object. They should avoid the name of board or bureau, and use the word institute, like the English Sanitary Institute. The other name would give an idea of coercing power, which was not the idea of the committee.

On motion of Dr. Mullin, the report was referred back to the committee to be more fully considered at another time.

Dr. Ross said the Committee on Publication had no report to make, as no publications had been issued.

The following nominating Committee was then appointed—Drs. Roddick, Kennedy and Rodger, Montreal; Adams, Wright and Sheard, Toronto; Campbell, Seaforth; Tye, Chatham; Earl, St. John; Sullivan, Kingston; Mullin, Hamilton; Wishart, London; Harrison, Selkirk; and Dr. Bray, of Chatham, the mover.

The chairman appointed the following gentlemen officers for the sections:—Medical Section—chairman, Dr. Thorburn; secretary, Dr. Burt Surgical Section—chairman, Dr. Roddick; secretary, Dr. Tye.

The meeting then adjourned till two o'clock.

AFTERNOON SESSION.

The President, Dr. SULLIVAN, resumed the chair shortly after two o'clock, and after inviting Dr. Worthington, of Clinton, Ont., to a seat on the platform in addition to those to whom he had extended the invitation at the morning session, proceeded to deliver the following

ANNUAL ADDRESS.

GENTLEMEN OF THE DOMINION MEDICAL ASSOCIATION AND GENTLEMEN,—It is with feelings of no ordinary diffidence and trepidation, I assure, you, that I assume the exalted position your generosity prompted you to confer on me, and these are increased to embarrassment, when I view the unusual circumstances attending our meeting to-day. The time the place, above all, the presence of so many distinguished strangers, all unite to render it the most memorable in our brief annals; and, while I feel as proud as any one possibly could to fill so honorable a position, I feel bound to acknowledge that my anxiety for the honor of Canadian medicine makes me wish that some of the Nestors of the profession had assumed this portion of my duties. However I feel I shall be sustained by that small but honored number who, in their zeal and devotion to science, as well as in the inspiration of a pure and noble patriotism, founded this organization and watched over its infancy, and whose fostering care guided it to a healthy adolescence. Be assured, gentlemen, the generous spirit which prompted you to place me in this position in preference to many others better entitled, is fully appreciated, and will constantly nerve me to greater effort. I feel the profession has no higher honor to give, and if I cannot add to its laurels will take care to return it as bright and unsullied as I received it from you.

Gentlemen, eighteen years ago the scattered political divisions of this great territory, feeling their isolation was unnatural, and actuated by that spirit of ambition without which a nation, equally as an individual, is dead, and, moreover, anxious to more fully test the solidity, enterprise and capacity of the monarchial principle of government, under which they had grown and prospered, felt that the time had arrived when united they would form the nucleus of a great nation, that no longer the barriers of prejudice and provincialism should separate them and retard their growth. Accordingly animated by such sentiments, without passion, blood-shed or battles, they joined hands, and, in a manner becoming the eldest children of Great Britain, consummated a union in as pleasant and joyful a manner as a marriage ceremony; Full of peace and goodwill to all they stood up in their might, and in the consciousness of a healthy maturity demanded admission to the comity o nations. Never before in the history of the world had such a scene been witnessed. It was a proud day for even the greatness of Britain to acknowledge the grandest epoch in the history of her great colonial progress and the greatest tribute ever paid to the free, liberal institutions of England No sooner had this been accomplished than the medical profession, representing to a large extent

the science, culture and civilization of its people, felt it was their duty to exhibit that spirit of unity and friendly intercourse characteristic of their profession, that the time had arrived to collect and utilize the stores of science of so extensive a territory, and lay

THE FOUNDATION OF THIS NATIONAL ASSOCIATION,

which would be representative in character, and add to the general stock of knowledge, and under whose protective influence the power of the profession would be increased, extended, and its members afforded an opportunity to know and respect each other. Animated thus by no selfish or sectional motives, it gave its first fruits generously to strengthen and adorn the new nation—so that, gentlemen, when we meet for professional advantages, we also commemorate an important national epoch and afford, an opportunity not frequently enough given, to assemble where no religious, sectional, social nor political prejudices can be tolerated. Two principal objects, gentlemen, remind us in each revolving year, to attend these meetings, 1st, Social friendly intercourse—this must, to the profession of Canada, for many years to come, be the most potent attraction. We, by a very large majority, belong to the class called general practitioners. A brilliant,but,unfortunately, very small minority of specialists, add a more scientific tone to our meetings, and shed lustre on our proceedings, but the attendance must for some time to come be recruited from the ranks of the general profession, and to none is the summons more agreeable, for none toil more faithfully and constantly than we. How gladly, then, must we hail the announcement of this meeting. What a splendid excuse to give to exacting patients; how delicious to one this pleasant, social intercourse, how cooling to our brain, and how refreshing to have some sympathetic ear to listen to our troubles, doubts and perplexities; with what zest we enjoy the hospitalities of the profession in each locality, how necessary it is to keep one's mind, as it should be, broad, free and liberal. Yes, gentlemen, self-conceit, egotism and narrow-minded bigotry are the products of isolation, reserve and privacy; without some variety we degenerate into mere creatures of routine. On the other hand,

THIS FRATERNAL INTERCOURSE

enlarges the mind, dispels prejudices, cultivates charity and humility, and developes that genial, warm-hearted philanthropy that makes the physician, as he should be, the highest example of intellectual, moral and social culture. Other professions admit of opportunities for display, with all the brilliant accessories of forum, court or pulpit, but medicine offers no such arenæ. It belongs to private life. Weary with toil, watching and anxiety the physician has no sympathizing audience to cheer him on, no brilliant assemblage to arouse his enthusiasm or applaud his acts. Many of his deeds which, if publicly exhibited, would delight and charm and bring him honour and fame, are performed in the quiet stillness of the night in some low, dingy tenement, his audience often an old crone who, in the fullness of her heart, may exclaim, "Well done, doctor: I always thought you were lucky!" Really, we should be disposed to pardon some infractions of that rigid etiquette which forbids him to use the publicity of the secular press so freely allowed to every other profession. To those who have passed through such scenes, what a great relief it is to come here and renew old friendships, form new ones, relate the cases we have had and the wonderful recoveries effected, so often told that we believe them ourselves. How joyfully we return home and how refreshed and invigorated we pick up our work, and go on our way rejoicing. Yet another, and more important, attraction, brings us to this meeting, viz: scientific progress—to communicate the results of our observations, the aims and objects of our labors, the interchange of experience, our ideas on the various professional subjects to which we have given thought and time, our opinions on the truth of the various theories advanced, contributing by articles or discussions, stimulating the growth of a spirit of research, observation and experiment, which may bring fame to ourselves, honor to our country, or add to the general stock of knowledge. True we may have no new theories to propound, discoveries to announce, nor principles to enunciate, yet do we add to the general advance.

THE HISTORY OF ALL PROGRESS

in science teaches that the labors of many minds, for many years, are necessary for the discovery of any truth, and although one gets the honor, yet are the works of many indispensable to him whose good fortune it is to crown the work. Galileo, Kepler, Bacon, preceded Newton. Priestly, Galvani, Volta, Lavoisier, led up to the great chemical discoveries of Davy. Sylvius, Fabricius, and, above all, the monk Michael Serectus, did as important service

in the great discovery of circulation as Harvey. Another fact, gentlemen, consoling to us is that the greatest results often follow from the simplest discoveries—inventions which apparently require no great intellect. Thus the discovery of percussion by Avenbrugger in 1761, and the subsequent surpassing one of Laennec, though purely simple mechanical inventions, had more influence on the development of modern medicine than all the systems evolved from the brilliant intellects of the 18th century, of such men as Booerhaave, Van Suieten, Hoffman, Stahl, Haller, Cullen. And the most scientific and exact method or school the world ever saw, the modern German school, acknowledges as its founder Johann L. Schonlein, and dates its origin from his apparently small discovery of a parasitic growth in a disease of the hair, in 1839. It may, no doubt does, seem simple to many of you to mention such facts; but you will pardon me when you remember I am speaking to many who, like myself, require such examples to urge us on to work. The great territory we are scattered over makes communication difficult, and many have, as I know, from listening here been prompted to observe more closely.

A RETROSPECT.

My first idea, gentlemen, in thinking over a subject likely to be of sufficient interest to you, and within my powers of description, was to give a brief retrospect of surgery since my entrance to the profession, twenty-six years ago. After the expenditure of much time, I found it too hypnotic even for myself. Fortunately, a kind mentor said, "To the Sections belong such subjects." "To you, as President, belongs the duty of noticing such subjects as are of general interest to the profession in this country, and will evoke from the society opinions which their importance demands, as also a brief review of the general progress since our last meeting. I need hardly say his advice was peculiarly grateful, and I have endeavored to act on it. Invoking your indulgence in listening, as well as your counsel and experience in disposing, we will proceed to consider them. About a month ago I was presented with a book usually looked on with repugnance, a blue book; it was a portion of the census of 1881, the last one taken, and just published. I found some facts therein, possibly not new to you, but new and surprising to me. I found the population of the whole Dominion to be 4,324,876, scattered over an immense territory. Of this Ontario has 1,923,228, Quebec 1,359,027, the balance being divided among the other provinces. I found the death-rate varied a great deal without any reasons given; from 11.81 per 1,000 in Ontario, the healthiest; to British Columbia with 20.35; Quebec following closely with 19.07 per 1,000 persons. On looking at the totals, I was astonished to find Ontario, with nearly 600,000 more population, had some 3,000 deaths less per annum than Quebec, the figures being—Quebec, 25,930; Ontario, 22,727; population considered, the difference is simply enormous.

QUEBEC'S EXCESSIVE DEATH RATE.

In looking for causes I found that this excessive death rate in the Province of Quebec was due to the great mortality among children, the deaths from 1 to 11 years being more than sufficient to explain the discrepancy; that it is truly a "Slaughtering of Innocents" the figures will explain. For the first year Quebec, 8,350 deaths, 1,000 more boys than girls; Ontario, 5,418 deaths, 760 more boys than girls; Quebec, 5,016 deaths, 300 more boys from first to fourth year; Ontario, 3,080, with 200 more boys during the same year. Next table, from 4 years to 11 years, we have 2,776 deaths in Quebec, and 22 more boys, while Ontario for same time has 1,973, with 43 more boys, making a grand total of 16,142 deaths in the Province of Quebec from 1 to 11 years, and a majority of 1,290 boys, while for the same period Ontario has only 10,471, and a majority of 973 boys. Their totals are 26,613, with 2,263 boys. The difference in favor of Ontario, without reference to population, is the large one of 5,671. Were it not an official document carefully prepared, I would not believe it; it is a matter which concerns all the provinces; but the fair fame of the Province of Quebec is particularly impeached. It is also eminently proper that through this Society our statesmen may consider so important a matter, if only from an economic point of view, and prescribe a remedy.

SIR JAMES PAGET.

in an address before the International Health Exhibition last June, on "The Relation between National Health and Work," containing a vast amount of carefully calculated statistics, in eloquent, graphic language, describes the loss to Britain, and says with reference to preventible

diseases: "No one who lives among the sick can doubt that a large proportion of the sickness and loss of work might have been prevented or can doubt that in every succeeding generation a larger proportion still may be avoided if only all will strive that it may be so. Smallpox might be rendered nearly harmless by vaccination; typhus, typhoid, scarlet fevers, and measles might be confined within very narrow limits; so probably might whooping cough and diphtheria. The greater part of accidents are due to carelessness. Diseases due to bad food, mere filth, or intemperance, so far as self-induced, might by virtue and self-control be excluded, and with these, scrofula, rickets, scurvy, and all the widespread defects attributed to them could be greatly diminished." When I give you some of the diseases you will see how peculiarly apposite his words are. I only took the diseases showing the most marked contrasts or differences, and you will see how, without any intention on my part, they fall under the head of what Sir James Paget and everyone call "preventible." They make the case very strong against Quebec. I read Sir James Paget's lecture after I made out the annexed table. Bear in mind this only takes notice of deaths. Think of all the sickness they represent, the loss of work caused and the enormous waste, the results of these diseases:—

Disease.	Ontario.	Quebec.	Total.
Smallpox	46	714	760
Diphtheria	1,271	1,599	2,870
Teething	108	2,359	2,467
Diarrhœa	294	585	879
Cholera infantum	181	344	525
Dis. of throat	56	406	462
Dis. of brain	696	1,049	1,749
Scarlet fever	561	961	1,537
Fevers—Typhoid	594	1,081	1,612
Croup	556	574	1,130
Measles	375	341	716
Consumption	2,398	2,282	4,680
	7,136	12,295	

Apart from any humane or Christian principles, look at the enormous loss to the state, to a country such as this. Sir James Paget values each child at $40, and is ashamed to use so low an argument as expediency in favor of the saving of life and health; he only does so because sufficient motives are not found in charity, sympathy, and the happiness of using useful knowledge. It comes with peculiar good grace from this body to sound the trumpet note of alarm. Ontario may, no doubt is, only less guilty. Some extraordinary causes of mortality among children must be in force; think of the great loss of 714 deaths from small-pox. It is a positive disgrace. If the people will not be educated to use proper means, the law should command and enforce its command. This is an age of commissions when every contravention of political honesty is sifted. Let a commission investigate this, it demands it more than anything else, wipe out the disgrace, confer health on many, and thus bring wealth to the country. We must remember, too, how much we injure ourselves, by keeping foci of highly contagious diseases constantly on hand, ever ready to enlarge their baneful effects on the approach of exciting causes and repel the tourist and settler from our shores.

THE NECESSITY OF VITAL STATISTICS.

It reminds me also how necessary it is to have vital statistics constantly collected, how important they are for the comfort, welfare, and advance of a people, will readily appear from what I have said. It is time that Canada had a bureau, and I hope you may be called to pronounce on it. The number of physicians is put down at 3,507 for the Dominion, Quebec has 1,065, Ontario 1,718; proportions for Quebec, 1 physician to 1,276 persons, Ontario 1 to 1,119. We have over 900 students, distributed among 8 medical schools, 4 in Montreal, 2 in Toronto, 1 each in London and Kingston, ample to meet all our requirements. Compared with our neighbors we are far behind in production. They have by last returns, 1882-83, 119 medical colleges, graduating 4,000 doctors yearly, and having 12,000 students, so that, marvelous as is their growth, great as are its prospects, resources and wealth, the medical production keeps pace with it. No part of the habitable globe is better supplied; the average is 1 to 524 all round. Indiana, with the same population as Ontario, has 4,993, or 3,275 more doctors, 42 schools in the North Western fifteen states sent out in three years 5,364 graduates, and have 3,549 students preparing. The large cities show from 1 to 260 in Denver to 1 to 548 in Chicago. They have 90-000 doctors in regular practice, and only 8,300 are above 60 years of age.

CONDITION OF THE PROFESSION.

An important duty of mine, gentlemen, is a glance at the condition of the profession in Canada and it naturally comes under two heads: 1st. Is it

as efficient as the responsibilities and the progress of science demand? 2nd. Is it uniform throughout the provinces? and, if not, what can be done to bring all up to the level of the highest part? Gentlemen, without fear of contradiction, and with the firm belief of being able to prove what I say, I maintain that the standard of the medical profession in Canada is equal to that of any other land. Great excellence and distinction we cannot claim. The paucity of our numbers, the vast extent of territory, the exacting demands of our time, the absence of any great wealth, above all, the youth of our country and the great attractive power of our neighbors, plead powerfully in extenuation. Nevertheless, the average will compare with any. High-minded and upright, honored by his fellow-citizens, the physician acknowledges no superior. I point with confidence to the profession of this city where we are assembled, and say, "*Ex uno disce omnes.*" We will be satisfied with the example. With this our schools have much to do. They all require four years' study and all a preliminary examination of different grades of severity. We think, in fact we are sure, we have four times too many schools, yet their competition has been friendly; a generous rivalry animates them, the "*Sacra fames auri*" has not seized them; no underbidding by offering advantages to students of easy terms, rather a desire to excel, and render their course practical animates them. That this is so hear what the leading medical journal of the United States says of them:—"There is now and has been for some time a tendency towards the practical in Canadian medical teaching. While didactic lectures are given with greater care and zeal than ever, there is added that other great factor in medical education—observation. The various schools vie with each other in the practical department of the work. The anatomy is being taught by constant demonstration, the microscope is placed in the hands of every student and the test tube is as familiar as the scalpel. When we look at the careful manner in which both theoretical and practical teaching are given; at the high standard fixed by the different curricula, it must be admitted their schools are turning out a

VERY EFFICIENT CLASS OF PRACTITIONERS."

It is very gratifying to have such an opinion from so high an authority, and shows we need no be ashamed of "seeing ourselves as others see us. Moreover, gentlemen, a class of men are studying who, as was the case some years ago, are not compelled to go to work at once, but who, thanks to industrious parents, are enabled to devote more time to professional training, who can follow the bent of their scientific inclination, and slake their thirst at the fountains of medical thought, and experiment in Europe. They find it pays. From that class, annually increasing, we expect much; they are true to their country, glad to work for it, and their reward will come. And, gentlemen, these remarks remind me that it will not be considered invidious if, in passing, I should express the profound respect and affection the profession feel for the medical schools of this city. It was a great satisfaction to all to learn the good fortune of the medical department of McGill in securing an endowment, the first in Canada to obtain one. Its teachers have been strong supporters of this society from its inception. Its managers placing their veteran professors gently to rest on a well-earned fame, have wisely selected to fill its chairs a number of young men filled with the Promethean fire, ardent, enthusiastic students; thus hope and confidence are inspired in its future. Its endowment, too, is worthy of note. It is a public recognition of the excellence of the work done and a tardy recognition of the strong claims of our medical schools on the patriotism and munificence of the country. We of the west, where so many of her alumni are pushing her fame and their fortunes, have nothing but warm congratulations to offer. We rejoice in her prosperity, and hope no narrow lines of sectional prejudice will ever prevent us offering honor to those who deserve it. The other schools, too, are doing good work, and worthy of compliment. With refence to the uniformity of medical standard, I may say I hold with many that it is

THE DUTY OF THE STATE

to see that men well qualified to meet the serious responsibilities of the profession shall be found in every village and hamlet throughout the land. Our profession is too intimately mixed up with the people not to require a law, and a stringent one, too, to regulate the right to practice, and, while schools award degrees and honors to the zealous, faithful student, the State alone should say who shall or shall not guard the interests of the sick, the safety of its subjects. The matter comes under the head of education, and is, therefore, a state right. Then all you require is to imitate the example of Ontario, and place the profession in the position it is in there. Those who see how ardently the pro-

fession of the United States and the English sigh for such a law can only feebly realize its value and importance. Your power, gentlemen, will be immense if united. Surely in such an agitation the descendants of Pare, Bichat, Magendie, Bernard and Dupuytren will not fail to assist, when they remember the glories that cluster around the French school, that they are the representatives here of that land of science, art and culture, which for hundreds of years enlightened the world of medicine ; they will not hesitate, more particularly when they will have the regulation of such a system. Permit me, as there are so many strangers here to-day, and as an incentive, to urge on the gentlemen from Quebec to repeat, in a few words. how and

WHAT ONTARIO HAS ACCOMPLISHED.

Her first Act dealing with medicine was passed in 1817, then Rolph's Act in 1824 and from that time down to the amended Act of 1874 many Acts were passed which it will be unnecessary for me to refer to. By that Act Ontario leads the English-speaking world ; she has in active operation to-day what the United States sigh in vain for, England is struggling for. Previous to that Act three bodies possessed the power to license, or rather to recommend, for the governor really was the fountain of authority ; they were what I call " regulars," " irregulars," and " defectives," the colleges, homœpaths and eclectics. In vain look for any advance, so long as there were three, and these antagonistic, having no respect for, but rather hating, each other. If one made it difficult the other could make it easy ; no hope for the future. Various were the stories told of how doctors were made. All looked dismal and unpropitious ; it was seen that " we must stoop to conquer." To this many were opposed. They said, " What ! consult the eclectics and homœopaths ? " Never ! They will demand special examinations, you will nurture and encourage those who would rend the temple, and it did appear difficult. But the veterans of the profession, or some of them, said, " We will try." They said, " Gentlemen, you are equal with us ; alone we will conflict ; united we will form a powerful trinity. It is your and our benefit we should agree. We don't care for these schoolmen ; a fig for their degrees. In our hands is the future destiny of the profession in this state. You have no schools here ; we offer you the regulation of all schools. We know you have different ideas from us in the etiology and treatment of diseases, but you surely are anxious that the great fundamental branches of all medicines should be well known by those who intend to practice ; that anatomy, the basis of all physiology, chemistry, botany, jurisprudence, portions of surgery and midwifery are equally as necessary for yours as for ours. You will have a proportionate share of the representation, and for all time to come a voice in the regulations of the curricula, preliminary and professional. We will make a clean slate ; one portal of admission. They agreed, and by that compact Ontario led the world. Satisfaction results. The general profession has in its hands full control. Examinations are becoming

MORE THOROUGH AND PRACTICAL,

the schools received it in a proper spirit, they know it to be a fair arena for the " survival of the fittest." Their examiners have been most exacting ; the great number of subjects, from the nature of the union rendered necessary, are being condensed. They have also taken advantage of an examination, termed the Intermediate, which grammar schools prepare, and to this they add Latin, and have thus an uniform preliminary, if it is inferior. Now, why not make such a law universal for the Dominion ? You have the power. You have no such difficulties as Ontario. You have also its example to nerve you on. If you only put your shoulder to the wheel you can place Quebec in the van. After all we are not English nor French, but Canadians. I think this association should every year consider closely medical education. In vain look for a harvest if we do not sow good seed. We graduated last year over 160 students. Many of them do not remain ; they go to other lands, where their talents may receive fuller recognition. The time has come to revise the professional course. The old seven subjects have not advanced equally together, at least are far from equal in importance. Place chemistry and botany in the preliminary course and put pathology and histology where chemistry is now. A short course on medical chemistry would just fill the time now allotted to histology. The preliminary course also requires revision. As an examiner I have often noticed errors in style and spelling. For such an abstruse science as medicine, demanding so high an order of intellect, too much trained study and intellect we cannot have. Raise the attainments and not the fees ; guard against evasion and cramming. Let there be a thorough classical course ; nothing so disciplines,

refines and cultivates. We belong to private life, and should shine there, by the graces of polite learning and good scholarship; thus can you, if ever, have a profession to be proud of. To those who pooh-pooh this preliminary education, who affect to sneer at a stringent examination, I will read *in terrorem* an extract from the proceedings of the last meeting of the Medical Association of the great State of New York. I may say they are struggling for amendment in this respect. They bewail their position, they are fighting hard for higher standards, and sigh for the state of affairs we have in Ontario, which they appear to look on as the desired condition.

THE NECESSITY OF A HIGH STANDARD.

I, therefore, to show the necessity of a high standard, quote Dr. Sturgess, who in turn gives a selection from Prof. Eliott, the learned principal of Harvard University. In his report of 79-80, says Principal Eliott: "An American physician or surgeon may be, and often is, a coarse and uncultivated person, devoid of intellectual interest outside of his calling, and quite unable to speak or to write his mother tongue with accuracy. What wonder if, under the circumstances, the degree of Dr. of Medicine has not heretofore been accepted as a passport to refined society. It is notorious that as a rule medical students have been a rougher class of young men than other professional students of a similar age. In this university until the reformation of the school in 1870-71, the students were noticeably inferior in bearing, learning, manners, and discipline to the students of other departments. They are now indistinguishable." And a respectable New York daily, quoted by Dr. Sturgès, says: "To say that medical students are rough but faintly expresses the facts, for they are also ignorant, often grossly immoral, exclusive of the bogus institutions like the late college in Philadelphia. The only requisites for the degree of M.D. in many of our colleges are sufficient money to pay the fees and a tolerably good memory. Even the latter is of secondary importance and without even a common school education they (the doctors) aspire to a social position for which they are totally unfitted by nature or experience." Such gentlemen is the outcome of leaving so much to the student himself—so much to what is called "unbounded opportunities." I believe it to be better not to trust the individual until mankind becomes better, but stick to the European plan which demands a liberal preliminary education, four years' study (professional), examination for diploma and examination for license.

FEMALE MEDICAL EDUCATION.

I believe, gentlemen, Canada has also settled the question of female medical education, at least has so treated it as to consider it settled. What bacillus disturbed the hitherto placid flow of the corpuscles in Canadian female vessels I leave to Professor Osler to discover. Its action aroused in our dear sisters that spirit of curiosity to penetrate the arcanæ of medical science and demand admittance to the temple. For a short time all went well, nothing could exceed the gallantry of their male fellow students. It was charming to observe the spirit of kindly welcome they were received with. Alas! It was of short duration. A storm arose (and through no fault of the women); all was changed. The male members demanded their exclusion, and they were forced to retire. Public feeling was aroused, generous men came to the rescue, pronounced co-education a failure, and two female colleges fully equipped were founded. Three women graduated from the Kingston School, greatly distinguished themselves in the race for license, asked no favors, and are now practising. Why they did not invade the sister professions of law and theology I do not know; if they can take all the tests required, I see no reason to object; I believe they will be the means of raising, not lowering, the standard. Allow me to call your attention to the important subject of the

COLLECTIVE INVESTIGATION OF DISEASES.

The American Medical Association at its last meeting warmly endorsed it and voted $300 to carry it out. It has been attended with the best results in the hands of our great prototype, the British Medical Association. Our country, extending over so large a territory, with such varied racial, climatic and other conditions, ought to be peculiarly favorable for it. An easy subject could be selected, first, one simple, and of general interest, that any general practitioner could manage. Apart from its scientific value, it would be a means of uniting more closely our scattered forces, and be another link binding us more firmly together. I presume it will be considered by a special committee. It was in my opinion a very unfortunate train of circumstances that led to the stoppage of

the publication of "The Transaction." True, our medical journals, with a courage and enterprise highly creditable, give a very good account of our meetings, but that does not meet the wants. The most important part, viz., the discussions, are wholly ignored. These volumes, therefore, if only as a record of the national medical progress, would be of immense value. By all means revive them. Each man could revise, and, if required, pay for the publication of his contribution, if it passed the censors. Experience will dictate some plans whereby the publication can be resumed and its suspension guarded against in future. As this meeting is held in the commercial centre of the country, it seems peculiarly appropriate to bring forward the subject of the

MEDICAL SERVICE ON OCEAN STEAMERS.

If it be correct (as I have heard) that the British acts order that these officers be shipped only at its ports in Europe, we ought to have it amended; we ought to have more of these appointments. Great room for reform is said to exist, and a bill now before the American Congress demands an extra physician on all ships carrying over six hundred, including the crew. Nurses and two small hospitals properly equipped are also to be provided, for the mortality given, in some cases as high as 70.6 per 1,000, appears to give grounds for these demands. Its particular interest to Montreal is my excuse for troubling you with it. The increased and increasing number of specialists affords, I think, just ground for congratulation. It is a feature more than any other indicative of growth and progress. If carefully examined, it is not the paradise the general practitioner sighs for. The eye and ear, throat and skin, and the uterus appear to be the favorite organs. Any good general practitioner, it is asserted, can treat two-thirds of special cases. The young man who selects such a field with us runs great risk. It were a grand thing were it a haven for old practitioners; but that cannot be, as it requires a man to concentrate all his abilities early on it. He has also to spend a good deal of time and study after acquiring his general knowledge, but the good effects of it are seen in stimulating the general practitioner to more study, to cultivate the use of instruments of precision beneficial in diagnosticating disease. As a man can only be a specialist on one subject, there can be no danger of his interfering with general practice. They help it greatly, and deserve every encouragement. So far Canada has not done much in

MEDICAL LITERATURE

of a substantial or permanent quality. A growth of this kind can hardly be forced, and there is certainly no dearth of medical books, general or special. It would be worthy of examination whether or not it would pay to publish a series of text-books. The schools could write, and entrust one book to each school. In this way it could be made profitable. I only hint at the matter, believing such a series could be written as would surpass that of any other country. So much noise made and ink shed by our American friends on "the code" led me to look for "ours," but such an instrument does not exist. Although not pretending to any higher morality than our neighbours, we shall not require one, and I fondly hope that the amenities that should exist between gentlemen will always be effectual to protect each in his rights. Rarely, indeed, have we to complain of want of sympathy and warm feeling in favor of those who are so unfortunate as to be called on to treat lesions of great difficulty in mean, exacting patients, and I venture to submit that a member so circumstanced should have redress before a court of this society. Not to the Hindoo alone is loss of caste a penalty; the lopping off of a member for such dishonorable practices, as I have felt and seen, is a power which this society might occasionally exercise with benefit to itself. The man who is afraid to speak out boldly, but by mean insinuations and to gain notoriety urges a patient to seek redress in a court of justice, for example in cases particularly of fracture and dislocation, and where there was neither want of skill nor care, should be broken and dislocated from this society and his conduct exhibited in its true colors. It would seem, too, that our courts should sometimes call unbiassed

EXPERT TESTIMONY.

A case occurred in my neighborhood where the unfortunate surgeon in attendance, a well-educated, experienced man, paid three hundred dollars and costs to stop a prosecution against him where one-half of the witnesses, old practitioners, too, were willing to swear a case of second stage of hip-joint disease was a thyroid dislocation. This was all based on reading books, and the evidence would have been given almost solely on them in behalf of the prosecution. The facility with which men will testify according to the side they are sub-

pœnæd on calls for some change; and great benefit, in my opinion, would result if the court would call independent expert testimony. I admit, it is a question requiring careful discussion. The probability of the International Medical Congress meeting next year in the United States should be noted. I would give our secretary power to select a few who will be prepared to maintain the honor of Canada in this great assembly. The threatened invasion of cholera has given a wonderful impetus to hygiene and sanitary laws; it has stimulated argely municipal scrubbing. This is one of its redeeming features. Dr. Oldwright, of the Ontario Board of Health, who has devoted more time and attention to it than any man I know, had kindly given me a large amount of information on the subject, which, I regret, time will not allow me to make use of. Since our last meeting Ontario has taken up the subject warmly. It has a well managed Bureau of Sanitation, and will, before our next meeting, have a well qualified board of health and a health officer in each municipality.

LOSSES BY DEATH.

Gentlemen, it is customary to perform the melancholy duty of reading the death-roll of our members, for the past year. There are, however, a few names not belonging to this society, yet of such concern to the whole profession, that it is our duty to offer a special tribute of respect to their memory. It is not often that a nation has to mourn in one year the extinction of a constellation of such brightness as was reflected from Marion, Sims, Professors Gross, Wood and Parker. All reached a ripe old age, accomplished much, and died honored and respected. The results of their labors were not confined by the boundaries of any country, but embraced the whole world of suffering. Such men all nations honor, their names are inscribed on the imperishable roll of the world's benefactors. We who have so often individually and collectively enjoyed the hospitality and courteous attention of their countrymen, whose delegates we meet yearly and are proud to see here to-day, offer, through these delegates, the expression of our profound regret at the loss they have sustained, and we do so in no perfunctory manner, but as neighbors united by the ties of acquaintance and friendship. Such, gentlemen, are a few of the subjects which it occurred to me might be of interest. No doubt I have forgotten many. They will be suggestive, I hope, to many of you and will be discussed with fairness. If they should be the means of evoking anything of advantage to the profession, I will be satisfied they have the merit of being practical, and demonstrate that medical legislation is not only not futile but of great benefit. A rapid review of the science now embracing so many subjects is no doubt part of my duties on this occasion, and requires powers of condensation rather than amplification. In medicine the spirit of research and investigation is

INCREASING AND EXTENDING.

Here "the deep searching Teutonic mind which spares no trouble nor labor in the steady pursuit of scientific aims" through everything, still leads as in other branches of scientific medicine. Could the author of De Sedibus Morborum now appear on the scene, how vast a progress, how great a change from his day, would he behold! True there were more theories then than now, but they must now be based on rigid experiment and oft-repeated observations. Hypothesis will not do, they must stand the test of critical scrutiny. The study of minute organism has led to wonderful results, surpassing in interest all other investigations, and exercising a wonderful influence on the causes and treatment of diseases, producing results which appear destined to effect a revolution in medicine. Bacterial pathology, as it is called, holds universal sway. We hear of nothing but microbes, bacilli and germs. Germs to right of us, germs to left of us, germs everywhere. We are stormed at by germs. The partisans of Cohnheim and Stricker, of proliferation and emigration, fold their arms and look on. Leucocytes have for the time lost their interest. The names of Pasteur and Koch alone absorb attention, they are known everywhere and we admire and wonder as disease after disease appears to yield to the investigator and the veil is removed. Already pneumonia, pleurisy, syphilis, some skin diseases, typhus, typhoid and yellow fevers are shown to depend on micro-organisms. The list lengthens. Last year the whole world was amazed at the discovery that tuberculosis, which, in one of its many forms, pulmonary consumption, carries off annually of the people of this Dominion 6,597 belongs to the bacillary group—is of parasitic origin.

The result of this year's investigation serve to confirm the idea, although for a time they are left out of sight by the startling announcement that

THE DREAD SCOURGE CHOLERA,

which threatens us with a visit, has also its peculiar microbe. More important still as the results of the brilliant experiments of Pasteur in producing by

attenuative culture a virus endowed with protective properties as well marked as those of Jenner in the case of vaccination for small-pox, that such is already attainable is shown by the experiments of Professor Freire, of Brazil, who this month reports that following Pasteur's method of culture he withdraws blood or some organic fluid and introduces it previously sterilized into Pasteur's flasks and containing solution of gelatine or beef. With this up to date he vaccinated 450 persons, almost all foreigners; freedom of disease has been pronounced, they having passed through quite a severe epidemic with only six deaths. Among the 450 less than two per cent., while it was thirty to forty per cent. mortality among those not vaccinated. According to calculations of Bousquet Charbon inoculation gives an immunity to one-tenth and vaccination of small-pox an immunity of one-fifth. Such preventive measures in the case of yellow fever are worthy of consideration to us, as demonstrating possibilities in the treatment of cholera or analogous diseases. Not all our sanguine expectations will be verified; it would be too long a leap, and we know. "*Natura non facit saltum.*" Only by slow degrees do we advance; that we are a long distance from perfection is shown by the fact that a French writer says of its attainment—the day when science shall have attained a complete knowledge of normal man, to the very depths and inmost parts of his organization, and into the most secret mysteries of his life, the day when science shall have unveiled all the secrets of the pathological condition and understood every modification that external agents can produce in the economy, that day science will be completed. We are far from that time yet. Such quickening and revival, however, has never been known before. Empiricism is despised, and the world demands more philosophic methods. Nations, too, seem more willing to

GIVE MEDICINE ITS PROPER ESTIMATE.

The scientific investigator can now hope for fame and reward. Germany pays three millions of dollars to its medical schools annually; France also gives large sums, and other countries follow, nor are they chary of granting them the honored titles of the state. Koch, Virchou, Langenbeck, Frerichs and many others have had their merits recognized. England, it appears, cannot get any further than knighthood, while Canada gives nothing. This should not be. It is the duty of our state to give some reward to those who maintain its honor in the scientific world, and who do so much "*pro bono publico.*" It should not require a man to wade through the septic paths of political life to reach the honored places in the gift of the state. What say you, gentlemen, to such a condition? Therapeutics, which have been awarded the importance of a separate section by the British Medical Association at its last meeting, and which are so important in relieving and preventing suffering, make more and more advance. Micro-organisms entering so largely as factors in etiology, antiseptics would be naturally looked to, and the report of last year's medical association (American) declares that antiseptic inhalations in pulmonary diseases have proved of value, whether the germ theory be sustained or not." In this department also the systematic collection of therapeutic results by collective investigating committees will be invaluable in showing the worth of remedies alone, united, or compared with others. A comparison of a prescription now, with twenty or thirty years ago, shows a wonderful difference. Chemistry for the past few years has produced many powerful remedies. The bromides, chloral, croton-chloral, pepsine, pancreatine, salicylic acid, and lately kairin, aldelyde jequirity, salts of nickel, nitro-glycerine, chlorides of gold and sodium are only a few of the drugs and remedial agents introduced, not to speak of the great changes in general treatment, are sufficient to show that pathology and physiology have not advanced alone. Fortunately, too, we have a conservative nation to revise our pharmacopœia and calm the apprehensions of the most timid.

SURGERY

as might be expected from the ardor, enthusiasm and boldness of its followers, the utility and brilliancy of its results, keeps more than pace with its sister art, medicine. Many and striking are its advances. Antisepsis still holds such sway as to be considered universal; for he who may be skeptical still must comply with the general demand in order to avoid censure. Its great champion has been knighted, which seems small honor to him for the work done by him and the world-wide benefits he has effected. A beginning of appointments to the Lords could well have been made with him, as his presence would effectually guard against the decomposition in that venerable assembly. At the risk of repetition, I will give you what I heard Sir Wm. McCormac state in his eloquent lecture last year at Bellevue. He said that

Langenbeck told him that in the Turco-Russian war of 21 cases of penetrating wounds of joints treated by immobility and sealed antiseptically 19 recovered with the use of the limb, while not one case of similar wound of knee-joint in the Franco-Prussian war recovered. He also said that the medical department in the late war in Egypt, which was fitted out with the best modern appliances, treated 436 wounds, some very severe, without a single case of any infectious disease, no erysipelas, and not a case of pyæmia. Truly no longer can the surgeon be accused of lacking vigor, originality or enterprise. And, gentlemen, the same may be said of all the departments of our profession. All advance in science is carefully watched to elicit the slightest advantage. Never before was medicine held in such high estimation.

EVERY YEAR ADDS TO ITS PROGRESS.

Let any man twenty years in practice, and who has read and kept himself informed, contrast its condition now and then. How immense the difference, how changed the diagnosis. And amid all this brilliant prosperity and march of scientific medicine what position do we occupy? I would rather hear the answer from others. We have no great past, no great names, no roll of honor, all our hopes are in the future. We look at the origin of the Royal Society, of the British Medical Association, now numbering its thousands, and we have hope. We have it in our power to ensure an educated, well-trained profession. Do it and we can expect great results. Our schools must not be to make money; they should be kept to the highest standard. We are able to hold out inducements to many ardent young men to qualify themselves by accumulating the stores of medical science. The profession will surely honor them, applaud their zeal and industry. We are satisfied with our country, proud of its growth and great future; we feel that freer, fairer or nobler heritage has not been given to the sons of men. No country possesses a better trained body of physicians. It needs no mystical lore to prognosticate solid results; the foundations are laid broad and deep calculated to support a structure solid, graceful and imposing. No country can boast of better institutions. With a true paternal care our government provides for every form of suffering; the Insane, the Blind, the Deaf and Dumb are in no country better treated, regularly and strictly inspected. Our hospitals, mainly supported by the state, yet allowing freely for private munificence, are models of neatness, economy, and efficiency; our journals keep pace with the progress of science, and exhibit an enterprise and originality worthy of a far richer country. Our schools have only to unite, decide on a few changes, work each in fair competition and great results will follow, so that we have reason for congratulation. We can by a little effort make this society more thoroughly representative Canadian. We must have it so that every Canadian from Cape Race to Vancouver will look to it with proud satisfaction. You know in this country the more sparsely settled a district is the stronger is the fellowship and affection, the more closely are families knit together. We should know each other better; many stores lie uncollected and much fine talent there is lying rusty. We must see to it that our society is more vigorous, more sheltering. We favor the growth of county and provincial medical societies. They should be the vertebræ of this. I see men around me who watched over the cradle of the society; they are, I rejoice to say, its strongest friends to-day, all honor to them. It is gratifying to see their efforts are appreciated by their example worthy of imitation, and when we come to celebrate our semi-centennial their eulogies will be delivered in eloquent terms, but the most eloquent of all will be the position of this society—large, numerous and powerful, rich in the contributions of its members to science, and making the name of Canada familiar as a household word in the great commonwealth of medicine.

THE BRITISH ASSOCIATION.

Gentlemen,—This year an honor of no ordinary nature is conferred on us, an advantage of great practical benefit, an event which, more than any other, indicates the progress and civilization of our country. It is the meeting of that great body, the British Association. After much labor and generous devotion our scientific men have induced that great body to visit us and hold their annual meeting in this city. Nothing illustrates the universality and freedom of science more than this event. In the noble language of the great Irish physician, Reason has extended its empire from the old to the new world, from Europe to the Antipodes. To-day she has the whole world for her domain, and the sun never sets on her possessions. Individuals take rest, but the general intelligence of mankind is forever sleepless. It would be strange indeed

were there no votaries of Hygeia among that learned body. I am happy to be able to announce they will do us the honor of being present at our meeting, and, what we value much more, will take an active part in its proceedings. No words of mine, gentlemen, can express the sincere cordiality of the welcome we offer them to-day. We hope their visit will be full of pleasant recollections, that they will have truly a feast of reason and a flow of soul. Not only their countrymen welcome them, but the descendants of the brave adventurous companions of Champlain, LaSalle and Frontenac, the profession of the people whose happy and contented homes they saw lining either side of the majestic river, before and after they passed the frowning battlements of the Gibraltar of this western continent, a people whose happiness, contentment and patriotism are expressed in the trite assertion of many of her sons, that the last shot fired in defence of British rule will be fired by a French-Canadian. They can on all sides see evidence of the success and geatness of a country which, although seven hundred miles from the sea, they are yet only in the gateway of. Gentlemen of the British Medical Association we are satisfied to offer you

THE MEDICAL PROFESSION OF MONTREAL

as an epitome of the whole body. You will find that courteous hospitality, generous and warm welcome in abundance, so that, when you return home it will be, I am sure, with the idea that, if we are not successful cultivators of science, we are capable of admiring it and honoring it in others. Gentlemen, on the second day of August, 1883, at the Philharmonic hall in Liverpool, at a banquet of the British Medical Association, in reply to the toast of "Our Visitors," one George E. Fenwick, while in the full swing of post-prandial hilarity, did then and there thank the British Medical Association, and said if it would visit us they would receive a cordial reception. Allow me to say not anyone was better calculated to tender that hospitality, as not any one will more faithfully carry it out. I am sure his order, if needs be, will pass current through the length and breadth of the land, for few places you will visit in Canada where you will not also find pupils who have sat at his feet to receive from an enthusiast the latest discoveries of science or watched in the theatre the dexterous hand and clear head which guided it through the boldest operations of modern surgery. Receive, gentlemen, my endorsation, and be assured you have a friend and willing host in every Canadian physician. Gentlemen, I thank you for your patient attention, which I feel I have overtasked. Rely on my constant efforts to promote the usefulness and extend the influence of your society. Its interests shall be always dear to me, and my constant aim not to be inferior to those who have preceded me in this high office.

At the conclusion of the address, on motion of Dr. Henry Howard, a hearty vote of thanks was passed to Dr. Sullivan for his most interesting and instructive address.

THE MEDICAL SECTION

met at half-past three o'clock and at a quarter past eight in the evening, under the presidency of Dr. Thorburn, of Toronto; Dr. Burt, of Paris, Ont., acting as secretary, when the following papers were read:—

"On Puerperal Septicæmia," by Dr. John Campbell, of Seaforth, Ont.

"On Nostrums and Medical Advertising," by Dr. Dupuis, of Kingston.

"On Cerebro-Spinal Meningitis," by Dr. Harrison, of Selkirk, Ont.

Dr. Harrison, in this paper; described a number of cases of fever, the symptoms being very much those seen in typical cerebro-spinal meningitis. He was sure they were not of the nature of typhoid; the symptoms and the duration were quite different from this. All the medical men in his neighborhood were convinced it was not of a common kind. It attacked well-to-do people and was very fatal.

Considerable discussion followed, exception being taken to the fact that no autopsies had been made, and that consequently errors in diagnosis were quite within possibility.

Exhibition of two cases of sclerosis of the spinal cord, by Dr. R. L. Macdonnell, of Montreal.

"On the Opium Habit and its Treatment," by Dr. Stephen Lett, Guelph, Ont. This was a very valuable paper, and gave a vivid description of the dreadful condition to which the victim of opium is reduced. He advised the careful treatment of these patients, and, admitting no antidote, considered that these patients are perfectly susceptible of cure under suitable management. His paper was listened to with great attention, and the writer was asked many questions, to which replies were given.

The last paper read was "On Some Varieties of Dyspnœa met with in Bright's Disease," by Dr. R. P. Howard, of Montreal.

THE SURGICAL SECTION.

also met at half-past three o'clock, and again in the evening, under the presidency of Dr. Roddick, who opened the proceedings of the section in the afternoon by thanking them for having appointed him as president of the section, and suggesting that in future all presidents of sections should be notified at the previous annual meeting, so that they might give an address on the special subjects of the section.

Dr. Blackader, of Montreal, read a paper on a "Case of Congenital Lipoma of the Foot."

Dr. Fulton, of Toronto, read a paper on "Thoraco-Plastic Operation of Estlander."

Dr. Serrifton, of Huntingdon, contributed a paper on a case of Hemorrhoids.

Dr. Fenwick, of Montreal, then read his paper on "Abscess of Abdominal Parieties, extending from Meckel's Diverticulum."

Some discussion ensued on this paper, in which Dr. R. P. Howard, Dr. Sullivan, Dr. King and Mr. Lawson Tait, the great exponent of abdominal surgery, and others, took part. Mr. Tait believed that in cases of obscure diseases of the abdominal parieties we should cut in and search for the cause. He considered it quite as legitimate to do this as it was to give a dose of opium to relieve suffering.

The following papers were also read :—

"Ligature of Anterior Tibial Artery in a case of Compound Fracture of the Leg," Dr. Shepherd, Montreal.

"Burns and their Results," Dr. Gardiner, London, Ont.

"Actions and Uses of Naphthalin," Dr. James Stewart, Montreal.

"Brief Remarks upon Fifty Cases of Trephining of the Mastoid," Dr. Reeves, Toronto.

The second day's proceedings opened shortly after ten o'clock, the president, Dr. Sullivan, of Kingston in the chair.

The minutes of the previous day's meeting having been read and confirmed,

Dr. MULLIN, of Hamilton, read the report of the Committee on Ethics, in which he recommended that any member not feeling himself in accord with the rules of the association should withdraw from it. He called attention to the reports appearing in the newspapers describing surgical operations, etc., and deplored the frequency of such notices. The public had rights which should be respected, and since the illness of President Garfield it had been proved that they took great interest in the progress of the sickness of a public man. But he did not see the necessity of giving minute details and recording such operations as the removal of fingers or toes, with the name of the professional attendant, as likely to advance or benefit either the public or the profession. He also denounced the publication in the daily or weekly journals of the cards of regular practitioners. The tendency of professional advertising was increasing daily, but he believed that the general public would willingly take notice and advantage of any specialty in a practitioner without advertising.

Dr. BOTTSFORD (St. John, N.B.) moved that the report be received and placed in the hands of the Publishing Committee for publication.

Dr. DUPUIS said he could not, in justice to himself, allow this report to be adopted without saying a few words. When he asked certain questions at the last meeting of the association he was not aware that a medical code for Canada had been published. The reason he gave the press a *resume* of his remarks was that the Kingston *Daily News* had published a very incorrect report of them. He had asked whether it would not be as well to let notices of medical men's doings appear in the press, and his reason for putting this question, which gave so much offence, was that the papers were full of such reports. He could give an instance of a gentleman who had risen to eminence in the profession chiefly through frequent notices in the press. All he had sought was to bring this matter into discussion. If the association objected to any views of his, let it do so without repudiating the man and stigmatizing him as a freebooter. He had during his twenty-six years practice always endeavored to be bound by the principles of medical etiquette, and to do unto others what he would others should do unto him.

Dr. MULLIN said he would be very sorry to make any statement reflecting on any member of the association unless circumstances amply justified it. It was easy to see that Dr. Dupuis, in asking certain questions at the last meeting of the association, expected an affirmative answer and held affirmative views. He had then quoted the opinion of the Rev. Henry Ward Beecher, who

saw no objection to local notices unless it were the breaking through of an ancient and time-honored custom, and expressed his opinion that there could be no real objection to a statement of facts relating to a surgeon's operation than to the deeds of any other man. Dr. Dupuis had also characterized the consultation of medical men as hypocritical; they disagreed, he said, in private, but agreed to be unanimous in public. If Dr. Dupuis had been the associate of medical men who disagreed among themselves and professed to be unanimous before those who employed them, he had associated with a very low class of practitioners.

Dr. BOTTSFORD raised a point of order. They were not discussing a personal matter.

The CHAIRMAN ruled adverse to the point raised. The report was received and open for discussion, and he was not aware anything offensive had been said or at variance with the report.

Dr. BOTTSFORD asked leave to withdraw his resolution, as the report referred to a particular case.

On a show of hands the chairman declared the resolution could not be withdrawn.

Dr. OLDRIGHT (Toronto) said, as regarded advertising, he did not see why a man who confined his attention to a particular section should not say so rather than pass as a general practitioner.

The resolution that the report be referred to the Publication Committee was then put and carried.

MAL DE CHICOT.

Dr. HINGSTON drew attention to the statement of a distinguished writer in *Le Dictionnaire de Médécine*, published in France, that there existed in Canada a frightful disease called *mal de chicot*, which had been brought to Canada by the early British settlers, and committed great ravages in certain districts, notably Baie St. Paul. Did any one present know of this disease?

No answer being given, Dr. Hingston said it could be taken for granted no such disease existed; otherwise in a meeting of medical men from all parts of the country, something would be known about it.

Dr OSLER thought the disease referred to was scurvy. In Great Britain a general impression prevailed that scurvy was a common disease in Canada.

MR. LAWSON TAIT'S ADDRESS.

Mr. LAWSON TAIT, F.R.C.S., of Birmingham, then delivered an address on "Abdominal Surgery," which was listened to with much interest. In beginning his address Mr. Tait said: "Every gardener knows that a plant long grown in the same soil rises or sinks, or somehow or other gets to a level from which it varies not so long as its conditions remain the same. And he knows as well that if he takes that plant to a new soil which suits it, if he grows it under new conditions, its growth and change and development are practically endless. What we know of plants is, within limits, as true of humanity, and if we require proof and illustration of this where need we go but to this endless continent of yours? I am not concerned at present with natural boundaries created by languages which come from Sweden and Poland, Denmark and Scotland, Russia and Ireland, which temporarily limit intercourse between different people who have settled here, still less do I trouble about a line on the map which marks off a practical republic in the South from a splendid democracy in the North. I have only to do with the great fact in human history—I think the very greatest fact—that from out of the troubles and distresses of our eastern countries, from out of countries oppressed by over-population, and still more by the effete policies of governments of past centuries dislocated into modern life, there has come a great country and a great people whose growth and change and development promise to be practically endless. Of my own country and my own people you will not expect me—you would not wish me—to say anything disparaging. We are an old and respectable race, and by virtue of your descent you share that age and you have brought over with you a full share of the respectability. But in transit you have lost that questionable virtue of extreme conservatism which we retain in every conceivable phase of life. We used to have mail coaches protected against robbers by armed men properly named guards. We continue to call our railway servants guards, without the slightest reason, whilst you, very properly, call the same officials conductors. We still build our railway carriages in compartments to hold six people, compartments that are stuffy, inconvenient, wasteful of room, and dangerous; solely because a hundred years ago we built our stage coaches on this pattern; and we

thought, and continue to think, that sticking three of our old coaches end to end must of necessity form the best kind of vehicle for railway travelling. Untrammelled by tradition, you have contrived far better carriages, but, in spite of their introduction in England some ten years ago, they have actually been taken off some of the lines because the public will not use them. I might gather further illustrations from religion and politics, and hundreds of other lines of life, but I prefer to take one of which I can speak at length and in detail, and one upon which I believe, if I read aright the compliment you pay me by asking me to appear before this audience, I can speak with some authority. In my youth the medical education of a British youth was not complete unless he had made the tour of the schools of France and Germany, and, like others, I felt of myself, as was said of Proteus: "It would be a great impeachment to his age in having known no travel in his youth." How I wish now that the time and money therein spent had been devoted to the western instead of the eastern continent; and I predict that ere long it will be to the medical schools of America that our students will travel as did the apprentices of old before they settled down to the serious exercise of their craft. For many years past I have been visited by numbers of my professional brethren from this side of the Atlantic, many of whom have settled down for days and weeks and months to see my work. I have been overwhelmed by the kindliest invitations to visit their continent, but till now I have never ventured across. My delay is an instance of British conservation, for it is very little the fashion amongst us to take holidays. I have not had a holiday for seven years, and only the most eminent doctors in England take an annual outing. But I find on this side none of you think much of a trip across the water involving your absence for three or four months, and from what I have heard the struggle for existence is as keen as it is with us, perhaps keener. My American visitors have one and all impressed me with a power which in England I assert we do not possess at all, that of judging a question upon its merits, and entirely apart from the prejudice of tradition or personal bias. No matter how we may struggle against it, tradition rules all we do, we cannot throw its shackles off, and I am bound to plead guilty myself to this, perhaps as fully as any of my countrymen may have to do. I may have broken loose in some lines, but I know I am firmly bound in others. My hope is that my present visit may extend my freedom. Let me briefly remind you of the early history of abdominal surgery. The first ovariotomy was performed in Scotland in 1701, unwittingly, that is, Houston began a tapping, and finished a successful ovariotomy. It was not till 1809 that his example was imitated, and even then it was not in Europe, but in the fresh soil of the backwoods—Kentucky—that the young sapling obtained its first full growth, and from this time dates the history of abdominal surgery. But how slow the growth! In 1863 I heard my master, the professor of surgery in the University of Edinburgh, settle all this vast field of human progress in the few words, "Abdominal surgery is abominable surgery." Lynn, the greatest surgeon by far with whom I have ever come in contact, shared his colleague's views, and in both these views originated far less in the merits of abdominal surgery than in their mutual dislike (almost the only sentiment they had in common) of John Lizar, who, having read McDowell's manuscript, sent to John Bell, was immensely struck by the success of the heroic Kentuckian, and was desirous of following his example. Most unfortunately for humanity John Lizar's success was of a very doubtful kind, and so abdominal surgery had to wait till the time of Baker Brown. The story of this brilliant and unfortunate surgeon is now a twice-told tale, and I can only repeat here what I have said before, that his disastrous downfall was a misfortune for humanity, as it delayed the progress of abdominal surgery fully a quarter of a century. The whole question of this progress lay in the issue as to whether the pedicles of ovarian tumors should be dealt with inside the peritoneum or outside of it. Here again the new country was first, for between 1820 and 1880 the decision in favor of the intra-peritoneal method was given in America in such a way that it never ought to have been questioned again. Unfortunately, the arbitrament of the fate of abdominal surgery between 1866 and 1876 was left in the hands of Mr. Spencer Wells, and he left off with a mortality of 25 per cent., wholly prohibitive of any attempt to open fresh ground." Mr. Tait further reviewed the history of the enormous modern success in the removal of ovarian tumors, and pointed out that it was to the labors of Thomas Keith that we chiefly owed our present success. He touched upon the recent great advances in the treatment

of uterine tumors, of tumors of the liver, of the spleen, of the kidney and of the pelvis, all of which, until a few years ago entirely beyond the art of the surgeon, had now been brought within the limits of his most successful efforts. The reason of this success was to be found chiefly in the immense attention given to details, and the strict insistence upon discipline upon the part of the patient and the nurse. Each advance has brought others in its train. He further dealt with many of the special ailments peculiar to women, in which great strides had been made, and concluded as follows :—" Let me thank you from the bottom of my heart for the reception, kindly, I would almost say enthusiastic, with which you have favored me. In this reception, I recognize fully the fact that it is given to me not from any merits of my own, but as a representative of a large body of men in the Old Country to whom in the past you have owed much, with whom in the present you are bound in a firm union of brotherhood and a sacred community of purpose. That nothing should ever endanger that union must be the earnest prayer of every right-thinking man, for as the blunder of a century ago robbed England of some of her fairest colonies and her most industrious workers, and thereby retarded the progress of the whole human race for nearly three generations, so would any fresh mistake be disastrous beyond expression. God grant that we may never see it." (Loud applause.)

Drs. McMillan (Hull), Brush (Utica), Trenholme, Hingston, Hayward, Smith and Gardiner took part in a brief discussion which followed, and a vote of thanks, moved by Dr. Grant, of Ottawa, and seconded by Dr. Brodie, Detroit, was enthusiastically carried.

The meeting then adjourned until the afternoon.

THE MEDICAL SECTION.

met at 3.30, Dr. Thorburn, of Toronto, in the chair ; Dr. Burt, of Paris, Ont., secretary.

Dr. Ross showed two specimens of thoracic aneurism. He pointed out the physical sign of ascertaining pulsation by traction on the trachea in thoracic aneurism. It depended on the pressure of the aneurism on the trachea or a bronchis, and when it did not press on these parts the sign was absent.

Dr. Osler remarked that the knowledge of this physical sign was not as widely held as it might be, and it was found to be of great importance in discovering deep-seated aneurism in the thorax.

Dr. Worthington read a paper on two cases of " Diabetes Insipidus "—one with " escophthalmic goitre," which gave rise to a discussion, in which Dr. Harvey, of London, Dr. Mills, Dr. Sloane, Dr. Sheard, of Toronto, and Dr. Ross took place.

Dr. Mills then gave a description of the method used in Germany for testing sugar in the urine.

" Common Errors in Gynecological Practice " were dealt with by Dr. Gardner. Drs. Trenholme, McMillan, of Hull, and Smith, of London, also gave their experience on this subject.

Dr. O. C. Brown, of Acton Vale, read a paper on " Cases of Impaction of the Pregnant Uterus in the Pelvis as a Cause of Abortion."

Dr. Brotheroe Smith, of London, followed. He expressed his regret at not having been present during the previous discussion, and proceeded to show the advantages resulting from the use of the pelvic band for straightening the body and relieving undue pressure on some of the organs.

Dr. McMillan, Hull, and Dr. Trenholme gave their views as to the treatment to be followed in cases of the kind described by Dr. Brown.

Dr. Playter, Ottawa, read a paper on the relations of the medical profession to the public. He urged that greater attention be paid to prevention. That, he considered, was the main duty of the medical profession.

Dr. Bessey agreed in this view.

Dr. McMillan thought a physician should be retained to give advice in general on sanitary matters and receive extra fees for extra duties. As regarded the working classes, in the cities in England they formed clubs, and by paying a small subscription each retained the services of medical men on whom they could call at any moment. The fact that a working man knew he had a physician thus at call would induce him to apply for aid at first symptoms of disease and thus prevent a great deal of misery and suffering.

THE SURGICAL SECTION

also met in the afternoon, under the presidency of Dr. Osler, when Dr. Major, of Montreal, read a paper on " Buccal Breathing, its causes, etc."

The Chairman said he had much pleasure in stating that Dr. Elsberg, the celebrated laryngolo-

gist, of New York, was present, and he would call on him to make some remarks on the paper, which he did, much to the edification of those present.

The following papers were also read :—

"Paracentesis of the Membrana Tympani"—Dr. Proudfoot, Montreal.

"Cases of Uterine Myoma"—Dr. Gardner, Montreal, which elicited considerable discussion.

"Obscure case Femoro-popliteal Aneurism"—Dr. Shepherd.

During the afternoon Dr. Roddick exhibited a remarkable tumor in a man, weighing several pounds, and Dr. Sutherland, of Montreal, showed an interesting case of keloid, after which the section adjourned until this morning.

THE BANQUET.

The dinner given by the medical profession of Montreal last evening in honor of the Canada Medical Association proved a great success in every respect. The ladies' ordinary at the Windsor, in which the banquet was held, presented one of the most brilliant scenes it has ever witnessed, and its beauty was increased by the handsome floral decorations with which the tables were decked. Nearly two hundred guests sat down to partake of the abundant hospitality, and the *menu*, which was got up to suit the most fastidious taste, was ample to provide for every want. Shortly after eight o'clock the guests entered the hall and took their seats. Dr. W. H. Hingston presided, and on his right were Dr. Sullivan, President of the Canada Medical Association; Dr. Harley, of London, Eng.; Dr. Kendrick, of London; Dr. Grant, Ottawa; Dr. Shattuck, Brazil; Dr. Brush, Utica, and Dr. R. P. Howard; and on his left were Mr. Lawson Tait, Birmingham; Dr. Mullin, Hamilton; U. S. Consul-General Stearns, Dr. Bottsford, New Brunswick; Dr. McNab, Dublin; Dr. Farrell, St. Albans, Dr. Jervis and Dr. Fenwick. The vice-chairs were occupied by Dr. F. W. Campbell, Roddick and Rodger. The attendance included nearly all the leading medical men of the Dominion, besides representatives from England and the United States. Gruenwald's orchestra was stationed in the hall, and furnished musical selections during the evening.

"THE QUEEN."

After the many good things had been fully discussed,

The CHAIRMAN rose amid applause and proposed the toast of "Her Majesty the Queen," in proposing which, he paid a high tribute to the many noble qualities that distinguished Her Majesty as a Queen, a wife and a mother.

The toast was honored with great enthusiasm, the assembly singing the National Anthem.

"GOVERNOR-GENERAL."

The CHAIRMAN, in proposing the health of the "Governor-General," referred to the eminent services of former governors-general of Canada, and said that the present head had already distinguished himself by his tact, and endeared himself to the people of Canada by his courtesy and affability on all occasions. (Applause.)

"THE PRESIDENT OF THE UNITED STATES."

The next toast was "The President of the United States."

The CHAIRMAN in proposing it spoke of the harmony that existed between Canada and the United States and their mutual respect and esteem. Americans, he remarked, were attached to their institutions, and we admired them for it. Canadians were also strongly attached to their institutions, and wanted no change. (Applause.) We knew it and they knew it, and they both understood each other. He concluded by coupling with the toast the name of U. S. Consul-General Stearns.

The toast having been enthusiastically honored,

Consul-General STEARNS, in responding, said to be called on to reply to this toast so felicitously and eloquently proposed was an honor he thoroughly appreciated. The honor, however, was accompanied with the drawback that in addressing an exclusively professional gathering there was always danger of treading on some one's toes. In such a case one felt like the Irishman who, on his deathbed, being asked if he renounced the devil and all his pomps, said he was going into a strange country and did not want to commit himself. In no other country was the medical profession held in higher respect and esteem than in the United States. (Loud applause.) He referred in humorous terms to the fact that now-a-days the good all-round doctor was becoming antiquated, and specialists were becoming more and more common. Now, this was all very good for the doctors, but it was very bad for the laymen's pockets. He alluded to the debt of gratitude that the world owed to the medical profession, whose members occupied some of the most prominent positions in all countries. He con-

cluded by returning thanks on behalf of the President, to whom he paid a high compliment. (Loud applause.)

THE "ARMY, NAVY AND VOLUNTEERS."

was proposed by Dr. Campbell. He spoke highly of the Canadian volunteers in particular, drawing a lively picture of the different occasions when our men were called out. They were not merely feather-bed soldiers.

The toast was honored with three times three

Dr. NELSON, of B Battery, thanked the assembly most heartily for the manner in which they had received the toast. He said a good word for the medical officers. Wherever the army and navy had won distinction these had also earned their laurels in their quiet way.

Dr. STRANGE, M.P., also responded, and in doing so said Canadians were true, sterling British subjects. Their sentiment was essentially British. The Canadian army, though a small one, was doing good work. He eulogized the work of the military schools in training our young men in all the minutes of regular daily drill.

Dr. THORBURN, Toronto, was loudly called on to reply. The Canadian idea was to retain her territory and not encroach, unless our friends to the south gave provocation, when we would perhaps annex them.

THE BRITISH ASSOCIATION.

Dr. GRANT (Ottawa) in proposing the toast of "The British Association," said :—Mr. Chairman and Gentlemen,—It affords me great pleasure on this reunion of members of the medical profession of the Old and New World to take part in the proceedings, and more especially from the toast you have so considerately placed in my hands. The present more than any previous occasion in the history of the continent draws us together as one people. This is certainly a progressive age, an age stimulated and enlightened in every department of the wide domain of science by the united efforts of able and zealous workers such as we have the pleasure of joining with us this evening. The visit of the British Association to Canada in this important stage of our development is most opportune, and in order to convey some adequate idea of our growth during the past five years in population, finance, accumulation of production and interchange of commodities, a few facts may not be uninteresting. We have received more settlers during the past five years from the Old World than at any previous equal period during our history. (Applause.) In that time also we have retained a large number of our own people in Canada, and attracted an increased number of our American neighbors to settle in this country. Ontario statistics give us during the five years from 1879 to 1883 an increase in immigration in that province alone of 43,260 settlers more than during the five years from 1874 to 1879. For the first time Canada has effected a new loan at 3½ per cent. on the most favorable terms. (Applause.) The taxation from customs and excise has been reduced by nearly two million dollars annually during the past five years. The Canadian Pacific Railway has been pushed forward with great vigor, binding together the various provinces, and thus promoting a reciprocity of trade alike beneficial to all parts of our Dominion. To have constructed thus far this great work, without actually increasing our taxation, but with reduction of two million annually, is an undoubted evidence of the activity of our public men, of the resources of our country, and of the future which those who desire to make Canada their home have before them. (Loud applause.) What better proof of prosperity could we possibly have, as a source of encouragement of the working classes of all grades, than to learn that during the past five years the deposits in the savings banks and building societies increased at the rate of 5½ millions annually, and that a marked decrease in our imports in favor of home manufactures, shows an evident desire on the part of our people to encourage into our prospering country skilled artisans, educated agriculturists, and capitalists generally, as we possess resources yet undeveloped which cannot fail to make us in time a great people. What better proof could we possibly give of the expansion in trade and commerce during the past five years than the fact that the total imports and exports were, in round numbers, 45 millions of dollars more than in the five years previous? (Applause.) Our railway system and sea-going tonnage alike give evidence of remarkable expansion in trade and commerce. Our mines are rapidly opening up and being developed on the most scientific principles, and in the article of phosphate of lime, from the Ottawa country, not less than ten thousand tons were mined and disposed of last year, chiefly from the River aux Lievres. Fully half a million of dollars have recently been invested in the purchase of phosphate mines, chiefly by American capitalists. From

Nova Scotia to British Columbia we find evidences of activity in thus opening up the resources of our country. Iron, coal, silver, copper, lead and other ores are now being extracted with a more than ordinary vigor. In all these mines we observe the energy and zeal of the American intellect at work, as well as that of our own people. Our mines, our forests, our fisheries and our manufactures alike give evidence of the progressive spirit of the American people. We delight to have them as our neighbors, and are only too happy on every occasion to have them as Canadian subjects, enjoying our laws and our institutions, and the influence of the marked civil and religious freedom we possess. (Applause.) To form anything approaching an accurate estimate of the great resources of this country would, I fear, require more time than is at the disposal of the members of the British Association for the Advancement of Science. When they arrive at the great region of the Rockies, on this iron band so rapidly being constructed across the continent, then a more accurate idea can be formed of the extent of our territory, of the fertility of our soil, of the energy of our people, and of the future that is in store once it becomes an established fact that the way from ocean to ocean on the North American continent and on British soil makes it 700 miles shorter from China and Japan to Liverpool than any other route that can be chosen across this continent. The day is not far distant when Winnipeg, Toronto and Montreal will become great tea-distributing centres via the Pacific from China and Japan. (Applause.) Other lines of trade no doubt will spring up, and the great lines of steamers weekly sailing into Montreal, Quebec and Halifax, will be more than occupied in freighting the vast stores of material which must flow down from the far East as well as from the great Northwest to the Atlantic seaboard. I shall not now detain you longer, my object being merely as it were to convey a bird's-eye view of what has already been done, and what will shortly be accomplished in order to carry out on this North American continent the aim and object of our administration in forwarding the best interests of our common country. The members of the British Association will no doubt carry back to England warm and lasting impressions of this new country, and we trust that an expression of opinion will be given so as to encourage that tide of emigration which we need in order to cultivate and utilize these vast fertile plains that are merely waiting for the agriculturist. We have assembled here this evening but a contingent, if I might so term it, of the great body of the profession in Canada, and as a profession we are pleased and gratified to find with us on this occasion many so well known in our department of science and literature. We trust that on other occasions they will embrace the opportunity of again visiting Canada. (Hear, hear.) Our profession is a noble one ; we have a great work before us ; the relief of the poor and needy is within our scope, administering as we do to the wants of all who require our services, rich and poor alike. Our medical institutions are rapidly growing, our medical journals yearly increasing in strength and intellectual power ; and abroad our students, in the very best centres of medical training, are received with all the warmth we could possibly desire. And the more closely our educational system is inquired into, I feel satisfied the more lasting will be the impression that Canada is advancing in this department, and keeping pace with the institutions of a like character in other parts of the world. (Applause.) Without detaining you longer, and thanking you most cordially for the kind attention you have given to the brief observations I have now had the pleasure of making, I shall propose the toast which had so generously been placed in my hands, namely, "Prosperity to the members of the British Association for the Advancement of Science." (Loud applause.)

Dr. STRUTHERS of Aberdeen, in reply, adverted to the dread experienced by many at the outset to face the winds and storms and fogs of the Atlantic, but assuredly the warm welcome they had received would have been sufficient to dispel the memory of many fogs and storms, had they even encountered any. He spoke enthusiastically of the appearance of the country, alluding especially to the beautiful streets and thriving trade of Montreal. He then spoke of the effect of science in dispelling the clouds of superstition, and dwelt on the close connection between science and the medical faculty. After speaking of the number of Scotchmen eminent in the medical profession who surrounded him, he concluded by saying that should Canadian medical men visit the Old Country they would be received with a right hearty welcome.

Dr. HARLEY, F.R.S., replying, said Canadians showed they were the children of their parent in their inheritance of old John Bull's hospitality. In their case was fully exemplified that miracle of

nature in which the child inherited the good qualities of the father without taking from the father those qualities he inherited. Speaking of Montreal, he said that, seated in St. James Club, he could almost fancy himself at Richmond, on the banks of the Thames, seated in the Star and Garter. In conclusion he considered that the Dominion was the brightest colonial star in the British imperial crown.

Dr. BROWN, of London, also briefly responded expressing the great pleasure he felt at meeting so many esteemed Canadian friends.

Dr. ALEXANDER spoke of the great progress Canada had made. What struck him particularly was our social character and customs, which he proceeded to depict graphically.

"CANADA MEDICAL ASSOCIATION."

The CHAIRMAN, in rising to propose the next toast, "The Canada Medical Association," said that during the meetings certain questions had inadvertently come up which it had not been intended to introduce, the question of independence and annexation. Both these questions had to be looked at fairly and squarely, however, and there was no shirking them. (Hear, hear.) Speaking of the subject of the toast, he referred to the vast extent of the field covered by the association, which was four or five times greater than that covered by the English association. The association included members from as far east as New Brunswick and Nova Scotia and west to British Columbia, covering a distance of some 4,000 miles. Twenty years had passed since the formation of the association, and the good done by the organization during that period had been very great indeed. (Applause.) It tended to bring the members of the profession together, to remove those asperities of character and temper which were sometimes common. This was one of the greatest advantages of the meetings. He alluded to the services of the American Medical Association and the state societies, and expressed the hope that before long there would be similar societies found in each province of the Dominion of Canada. (Applause.)

Dr. SULLIVAN, of Kingston, president of the association, responded in an address replete with humor. He remarked that he was very proud of the honor of replying for such an organization, as the Canada Medical Association. (Applause.) The society, it was true, had not done so very much, but it was young, and there was, he was sure, a great future before it. He congratulated them upon the great success that had attended their present meeting, which he was assured would long be remembered by all of them. The papers had been much better than in former years and an additional interest had been given to the meeting by the presence of such eminent gentlemen as Mr. Lawson Tait and Dr. Harley. He expressed the hope that the society would continue to prosper until it became one of the most scientific bodies in the world. (Applause.) Referring to the visit of the members of the British Association he said there was no physician here in Canada whose doors would not be opened to these gentlemen. (Loud applause.) In conclusion he desired to express how proud they all were of the medical profession of Montreal, whose magnificent hospitality and warm welcome the members of the profession throughout Canada would long remember. He hoped they would always continue to hold the high position they at present held in this city. (Loud applause.)

THE AMERICAN ASSOCIATION.

Dr. BOTTSFORD, of New Brunswick, in proposing the toast of "The American Medical Association," referred to a visit that he had paid some years ago to the American Association as a delegate from Canada, and he had gained the highest impressions on that occasion of the services of this association. (Loud applause.)

Dr. BRUSH, of Utica, briefly responded, and said that as an American he desired to extend to their visitors from the other side of the Atlantic a most hearty and cordial welcome. (Applause.) Referring to the questions of independence and annexation that had been broached, he said that as to independence Canada was sufficiently independent, and while they extended their arms to them as brethren the United States had sufficient territory. The Americans were very glad to welcome the Canadians individually, but collectively they did not want them. (Laughter and applause.) He concluded by expressing his warmest thanks for the honor that had been paid to the American Association.

Dr. BRODIE, of Detroit, also briefly responded, referring to the union and harmony that existed between the American and Canadian associations.

THE ADVANCEMENT OF MEDICAL SCIENCE.

Dr. HOWARD said we had in the four oldest provinces a system regulating the entrance upon

the study of medicine. In each one there was a central board to supervise the entire subject of medical education. The boards in Ontario and Quebec were selected by election by the general profession, and the College of Surgeons in each province was a representative body, with this peculiarity, that while it sent representative men from the general profession, each teaching body had the right to send its representatives, so that both systems were represented in the medical council. The teaching institutions had their rights and representatives, and the general profession had, of course, an overwhelming representation. One of the first results of this arrangement was a uniform system of education throughout the Dominion. No student could now enter upon the study of medicine without first passing a preliminary examination in general education. That was a fixed fact in Ontario, Quebec, Nova Scotia and New Brunswick. Students were required to study four academic years, during which three sessions of winter study, of six months each, were to be spent at a medical college. A peculiarity in this country was that, with one exception, all our schools were teaching bodies in the sense of being universities; not hospitals and private schools attached to hospitals, but institutions possessing the power of conferring degrees in medicine. The important question was, in what way could we advance medical education? Firstly, as regarded preliminary education, could we elevate the present standard? In Ontario a student had to pass a High School examination, which included Latin, and was a thorough foundation of a liberal kind. In Quebec experts conducted the examination. These experts consisted of professors from four different institutions in the province, and the subjects of examination were perhaps slightly in excess of those of the sister provinces. The important question was whether we could raise the standard at present of preliminary examinations, and considering that in the States but one or two institutions insisted on a preliminary examination at all the question was a difficult one. In the Mother Country there were still institutions which allowed students to enter the study of medicine without a preliminary examination.

Dr. HURLEY—There are none now.

Dr. HOWARD said he was glad to hear this. The change was a recent one. It was questionable whether in a young country like this we were prepared to go much further in this matter than we had gone. It had been suggested by the president that we might dovetail into the preliminary examination a little chemistry and botany, but he questioned whether this would be an advantage. His own feeling was that the examination should be thorough, and although it covered sufficient ground at present, it might be made more general. When education was being much more generally distributed among the people it behooved the medical profession to keep pace with the advance if it would continue to be considered a learned profession. The time was not far distant when a B. A. or a B. Sc. would be considered a preliminary requirement. But it was not considered so in the Mother Country. Passing from preliminary examination to medical education in what way could we advance the latter? The most obvious was, lengthen the time of study. But there were four academic years with the option of spending one with a private practitioner. It was not too soon to make these four years compulsory in the teaching body, and add to them a summer session. Permitting the education to be intermediate for half a year was a great blunder and loss of time, and he was glad to say that the university to which he belonged had decided that in future the course of study should be four years, with one compulsory summer session. One of the outcomes of this meeting should be four academic years of nine months each, six months of a winter session, and three of a summer session. The summer session should be largely devoted to practical work, particularly in those subjects which require training in the use of instruments of precision. Our medical education should be of a more practical character, and greater attention should be paid to the teaching at the bedside. No American or Canadian graduate could obtain a license to practise in Ontario without going before a special medical board of independent examiners. That system, although it worked well, was not the only good one. We could adopt an equally good one in this province by appointing examiners to act with the professors of the respective schools having co-ordinate power and equal rights to accept or reject students. The system of this province was that all who presented themselves with diplomas from a British university and had complied with the requirements of the law should get a license. But we had the right to send two assistants to be present during the examination. As an association they should feel proud at

what had been already done in this country towards the establishment of a system of medical instruction. He was not in favor of our students going abroad to study until they had been trained here first, and then he would like them to visit elsewhere.

Dr. W. R. McNab, of Dublin, in responding, said, that in calling on a professor of botany to reply to this toast, the intention, evidently, was that he should be brief, as the subject of botany merely touched the fringe of medical education. He had only been a few hours in this country, and the first thing that struck him was the marked advance to be observed here in the education of youth. Canadians were far ahead in their educational arrangements of anything on the other side of the Atlantic. He was opposed to educating medical students in too many branches, and thus bringing on acute mental indigestion. As far as botany was concerned, they could always get men who would work laboriously and carefully in their laboratories, and give all the information required. The student should not be given too much to earn in the way of outside science, and botany, he considered, was an outside science.

"THE MONTREAL PROFESSION."

Mr. Lawson Tait proposed the health of the chairman, Dr. Hingston, and the profession of Montreal in general. Dr. Struthers had told them that the proposal to go to Canada was at first regarded as a very serious proposal. In Southampton, however, when Captain Pim introduced the proposal, it was regarded as something like a very solemn joke. (Laughter.) There it was hardly believed possible that British conservatism would so far depart from its usual lines. The hospitality extended to them in this country was simply unbounded. His amazement constantly increased that he should meet here two hundred men, all equal in physique, culture and mental power to any men to be met on the other side. He had had a little friendly passage at arms this morning, but it had been drowned completely in the flowing bowl, and, as Dr. Hingston had spoken to them, it seemed to him that the tones of his voice were familiar, and it dawned upon his mind this evening that his voice was that of their own silver-tongued Paget. He could not find words to express his gratitude to the association, and what ever his career might be in the future, he would never forget the reception they had received in Montreal. (Applause.)

The Chairman, in returning thanks, said he was at a loss to express his gratitude to Mr. Tait for the kind manner in which he had proposed the toast. He thanked the Canada Medical Association in the first instance for the success of this meeting. This year they were singularly fortunate in having in their midst so many distinguished men from the other side of the Atlantic, the mention of whose names alone called up the memories of the labors they had performed in the interests of the profession. (Applause.)

Dr. Osler next proposed the toast of the "Press," which was appropriately responded to by Dr. McAllister, of the London, Eng., *Practitioner*, Dr. Tuke, of London, and the representative of the *Gazette*.

Dr. Migneault proposed "The Ladies," which, having been responded to in a very gallant manner by Dr. Cameron, a most successful and enjoyable reunion was brought to a close shortly after midnight with the national anthem.

The third and last day's session of the seventeenth annual convention of the Canada Medi ca Association opened at the Synod Hall at ten o'clock yesterday morning, the president, Dr. Sullivan, in the chair.

After routine the chairman of the committee on nominations presented the following report :—

The committee on nomination in presenting their report to the general meeting of the association beg leave to make the following recommendations :—

Place of meeting for 1885—Winnipeg.
President—Dr. Osler, of Montreal.
General Secretary—Dr. Stewart of Montreal.
Treasurer—Dr. C. Sheard, of Toronto.
Vice-President—Dr. Bray, of Chatham.

ONTARIO.

Local Secretary—Dr. Burt, of Paris.

QUEBEC.

Vice-President—Dr. G. Ross, of Montreal.
Local Secretary—Dr. Bell, of Montreal.

NEW BRUNSWICK.

Vice-President—Dr. Allison, of St. John.
Local Secretary—Dr. Walker, of St. John.

NOVA SCOTIA.

Vice-President—Dr. Fraser, of Windsor.
Local Secretary—Dr. Almon, jun., of Halifax.

MANITOBA.

Vice-President—Dr. Whiteford, Winnipeg.
Local Secretary—Dr. Mewburn, Winnipeg.

COMMITTEES.

Publication—Drs. Kennedy, Fulton and Aikins.

Medicine—Drs. Cameron, F. W. Campbell and Saunders.

Surgery—Drs. Kerr, Kains and Waugh.

Obstetrics—Drs. Holmes, Mackay, and Campbell of Seaforth.

Therapeutics—Drs. Oliver, Swan and Tye.

Necrology—Drs. Fulton, Graham and Cameron.

Ethics—Drs. Harrison, Murphy and Rodger.

Education—Drs. Pyne, Sheard, Adams, Wright, Botsford, Allison and Arnott.

Public Health—Drs. Youmans, Grant, Harding, Robillard, La Rocque, Botsford, Playter, Covernton, Oldwright, Bryce, Parker and Kittson.

Arrangements—Drs. Ferguson, Kerr, Whiteford, Mewburn, Patterson, O'Donnell, Codd, Lynch and Jones, with power to add to their number.

J. G. RODDICK,
Chairman.

On motion of Dr. Buchanan, seconded by Dr. Worthington, the report was unanimously adopted.

Drs. Buchanan and Burt were appointed auditors.

Dr. Oldwright moved, seconded by Dr. Dupuis, that the secretary be instructed to notify each member of the association, either by advertisement in the medical journals or by circular, of the appointment of the committee to revise the by-laws, with the request that any member who has any suggestions to make shall send them in writing to the chairman of this committee on or before the ——day of ——next. Carried.

A vote of thanks was passed to the various railway and steamboat companies for favors granted to members.

Votes of thanks were also passed to the local medical men for their courtesy and hospitality; to the vestry of Christ Church Cathedral for the use of the hall, and to the general and assistant secretaries, Drs. Osler and Bell.

Dr. KING, on behalf of the medical members of the British Association, moved a vote of thanks to the association for courtesy received.

Dr. MCMILLAN seconded this motion.

The CHAIRMAN gracefully acknowledged the compliment.

The treasurer, Dr. SHEARD, read his financial statement, which was a very satisfactory one

Dr. WHITEFORD, of Winnipeg, said that seeing the association had decided to meet in his city next year he would suggest that they come about the 20th of August, as the country would then be in full bloom, and he wanted them to see it at its best.

Dr. OLDWRIGHT moved that the date be left to the president, secretary and local committee of arrangements.

Dr. RODDICK seconded this motion, which was carried unanimously.

Dr. DESJARDINS not being able to be present, his paper was taken as read.

The CHAIRMAN here noticed the presence in the hall of Dr. Bowdidge, dean of faculty of Harvard University, and invited him to take a seat on the platform.

Dr. BULLER then read a paper on Jequinity in Granular Ophthalmia which gave rise to some discussion.

Dr. ELLSBURGH, of New York, exhibited a pair of flexible forceps which would open although bent in half-a-dozen directions. It excited much interest being, as the chairman humorously remarked, as flexible as a politician.

Dr. OSLER, after thanking the association for his election, read a paper on "Pneumonia as an Infectious Disease." He showed that, according to experiments made by eminent men, the germs of the disease could be propagated, and afterwards an animal inoculated with them would exhibit the symptoms of the disease.

Dr. PATTERSON, of Fredericton, gave a number of instances that had come under his notice, and in which the diseases have proved infectious.

Dr. GARDNER, of London, thought that too much importance was attached to the germ theory and too little to climatic influences. For instance, in winter and spring inflammation of the lungs was most prevalent, diarrhœa in the summer and typhoid in the fall.

A vote of thanks was then passed to the chairman and the meeting adjourned.

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All communications and Exchanges must be addressed to the Editors, Drawer 356, Post Office, Montreal.

MONTREAL, AUGUST, 1884.

CANADA MEDICAL ASSOCIATION.

The seventeenth annual meeting of the Canada Medical Association, which met in this city on the 25th of August, was probably the most successful that has ever taken place. The time and place, and the influence of other attractions no doubt, induced the attendance of so large a number of its members, and the presence of the eminent medical gentlemen from England added very largely to the interest of its proceedings. As the Association does not publish its transactions we have placed upon record in this number the reports of the different sections and of some of the more important addresses which were made, deeming them to be of sufficient interest to our readers, although occupying so much space. We desire by so doing to draw particular attention to the objects and importance of these gatherings in elevating the science of Medicine amongst us, widening the mental horizon, and extending to the too often isolated members of our profession the bond of social brotherhood. From the success of this meeting we augur that the next will not only be as successful in the character of papers and debates but also in the increased members attending. There are a great many physicians throughout the Dominion who take little or no interest in this Association, either from lack of information regarding its working, from press of professional engagements, or their distance from the place of meeting. We would suggest that the general secretary send a circular to every member of the profession throughout the Dominion, giving information regarding memberships, fees, and other matters, that every practitioner may be conversant in regard to its existence, the funds of the Society being sufficient to enable this being done. Next year the Association will meet in Winnipeg, and as the trip will be a pleasant one, affording an opportunity of visiting our great west and seeing the wonderful progress made by this section of our country, with probably an excursion to the Rocky Mountains included, it offers an inducement to the eastern members which will, no doubt, greatly increase the membership. This place of meeting should be borne in mind by those who contemplate taking a holiday next season, as no trip could be more attractive.

THE BRITISH MEDICAL ASSOCIATION.

Now that the British Association for the Advancement of Science have held a most successful meeting in Montreal, what is to hinder the British Medical Association from following its example. Who will move in the matter?

PERSONAL.

Dr. Ernest Bronstorph (C.M., M.D., Bishop's College, 1884) passed the examination of the Royal College of Physicians, London, in July last. Dr. Bronstorph left London in August for his home at Tortola, Virgin Islands, West Indies. We believe he intends to settle in Kingston, Jamaica.

Dr. R. C. Blackmer (C.M., M.D., Bishop's College, 1884), has commenced practice at Gladis, a suburb of St. Louis, Mo. His first patient was a nephew of the celebrated Dr. Koch.

Dr. Wm. Osler, Professor of Physiology and Registrar in the Medical Faculty of McGill University, is a candidate for the chair of Clinical Medicine in the University of Pennsylvania, Philadelphia. The matter will not be decided till early in October, but we believe there is but little doubt that he will receive the appointment. His departure will not only be regretted by his many friends in Montreal but by the whole medical profession of Canada.

Dr. C. Cameron (M.D., C.M., McGill, 1883) and Dr. J. B. Loring (C.M., M.D., McGill, 1883) have both returned after more than a year's sojourn in Europe, and intend to commence practice in Montreal.

Dr. McKendrick, Professor of Physiology in the University of Glasgow, was a guest of Dr. D. C. MacCallum, during the meeting of the British Association for the Advancement of Science, in Montreal.

Mr. Lawson Tait F.R.C.S. Esq., of Birmingham was the guest of Dr. Wm. Gardner.

Dr. Cheadle of London was the guest of Dr. R. P. Howard.

Dr. Heywood Smith of London was the guest of Dr. Blackader.

Dr. Protheroe Smith of London and Dr. Beveridge, Professor of Clinical medicine in the Royal Infirmary, Aberdeen, were the guests of Dr. F. W. Campbell. Dr. Protheroe Smith is the originator of special hospitals for the treatment of diseases peculiar to women. This is universally admitted. Dr. Smith started the Woman's Hospital in Soho Square, London, in 1842.

DEATH OF SIR ERASMUS WILSON.

A cable despatch of the 8th of August announces the death of Sir Erasmus Wilson, the celebrated Dermatologist and Ex-President of the Royal College of Surgeons of England.

Mr. de Lamirande, the Detective officer of the College of Physicians and Surgeons of the Province of Quebec, acting for that Corporation, has since the 5th of July last, taken out the following actions:

1. Le Colelge *vs.* Pierre Dion, Charlatan of St. Césaire, P.Q.
2. College *vs.* Gabriel Courchène, bonesetter, of La Baie du Febvre.
3. College *vs.* Théodore D. Whitcher, of Beebe Plain, fourth action.
4. College *vs.* Théodore D. Whitcher, of Beebe Plain. This is the fifth action against him.
5. College *vs.* M. Eugène Ratelle, barber, chiropodist of Montreal, for taking the title of "Doctor" and "Physician" in a circular.
6. College *vs.* William McDermit, Charlatan of Milton Corners, first action against him.
7. College *vs.* Gabriel Courchène, bonesetter of La Baie du Febvre. This is the third action against him.

Local and General.

It seems as if every disease presenting constant signs and symptoms may yet be shown to be essentially the result of the immigration into the system of a distinct microbe, which, while propagating its kind, not only shows itself to the careful microscopist but also discovers itself to the observer by certain nervous and other phenomena, all of which go to make up the list of symptoms characteristic of the particular disease. The pathology of the disease will have thus resolved itself not so much into a study of these phenomena as into a statement of the habits and life-history of the microbian forms that caused them—in other words, we shall have to extend the chapters devoted to parasitic life in our text books and curtail those treating of specific diseases. Without presuming to give the microbe of, say, pneumonia, the place which it will in the future occupy in connection with the pathology of that disease it is in the meantime a very satisfactory advance upon the old ideas held in reference to the etiology of the disease.

Should a large number of diseased processes, and the symptoms which accompany them, be shown to be simply expressions of the "life in our life" of micrococci, and the differences in the symptoms merely differences in the cocci and in the effect which they produce upon our organism, many of the by ways and dark places of pathological anatomy will doubtless be lit up. So, too, we shall say that a disease is such in virtue not of the presence of such and such symptoms, or of the demonstration of such and such anatomical lesions, however useful they may be as corroborative testimony, but because a particular coccus is shown to be exerting its specific influence on the system.

Should this view of the coming pathology be true the words of Tyndall (for example) written fifteen years ago, sound like a prophecy: "There is a theory now broached, and daily growing in strength and clearness—daily, indeed, gaining more and more of assent from the most successful workers and profound thinkers of the medical profession itself—the theory, namely, that contagious disease, generally, is of a parasitic character. Let me briefly state the grounds on which its supporters rely. From their respective viruses you may plant typhoid fever, scarlatina or small-pox—that is the crop that arises from this husbandry? As surely as a thistle rises from a thistle seed, as surely as the fig comes from the fig, the grape from the grape, the thorn from the thorn, so surely does the typhoid virus increase and multiply into typhoid fever, the scarlatina virus into scarlatina, the small-pox virus into small-pox. What is the conclusion that suggests itself here? It is this: that the thing we vaguely called a virus is a *seed*; that, excluding the notion of vitality, in the whole range of chemical science you cannot point to an action which illustrates this perfect parallelism with the phenomena of life—this demonstrated power of self-multiplication and reproduction. The germ theory alone accounts for the phenomena."

All this sounds very fundamental now, but I notice that in certain quarters it is considered probable that typhoid fever does arise *de novo*, and that it is not associated with any specific poison germ. If this be true then enteric fever is not contagious, and all the talk about disinfection of the stools and the care which ought to be observed about the bedside of the patient is in vain. Personally I think this a dangerous doctrine and believe the autogenetic theory lately arisen to depend for its strength upon merely negative evidence ; the difficulty of accounting for appearance of the disease in out-of-the-way localities, the doubt as to the existence of special micro-organisms in the system of the patient, etc.

Remotely suggestive of this matter, I lately heard a well-known scientist tell the following story, which he vouched for as true :

A professor of botany in a medical school plumed himself on the practical course which he gave, never failing to illustrate his lecture by analogies drawn from the medical world of science. Thus he informed his class that for the purpose of producing a succession of large, fine flowers they should always be plucked before they wither, otherwise the plant would exhaust itself in its efforts to fructify and succeeding flowers would be small or imperfect, or the plant would refuse to yield any more. To emphasize this truth he pointed to the fading beauties of the human species whose charms often grow dim from similar causes. And this is the impression his discourse left upon the mind of a youth who was " quizzed " about it the next week : " Well, sir, women and plants are very much alike in this respect, neither of them should be allowed to fructify when they have the— " and the contracting brow of the lecturer warned him that he had said enough.

Dr. Henry Howard has lately published a pamphlet entitled " Physiological Psychology " which I have read, and if he will allow me I would like to criticize it. To begin with, why does he call himself a *physiological* psychologist any more than a *pathological* psychologist, for does he not draw his deductions relative to insanity from *morbid* states of the brain as well as from its healthy conditions ?

I would suggest the phrase *physical* psychologist, which would be descriptive of his position relative to the obsolete idea of the separate and independent nature of mind and body, and of his belief in the modern notion of the complete dependence of the one upon the other.

Dr. Howard will perhaps recognize the pertinence of this suggestion if I quote the last sentence of his pamphlet : "insanity is a *physical* disease due to *pathological* defect which causes loss of equilibrium in nerve forces. This is *physiological* (physical ?) psychology."

The modern theory which refers all our ideas, actions and thoughts, good and bad, normal and morbid, to changes in the nervous system may appear simple enough, but how little do we really know about it !

As says Griesinger : " Definite information regarding what takes place can neither be afforded by materialism, which would explain all mental acts by the physical, nor by spiritualism which would explain the material by the psychical, and even if we did know all that takes place within the brain when in action—if we could penetrate into all the processes, chemical, electrical, etc., of what use is it ?

Oscillation and vibration, all that is electrical and mechanical, are still not mental conditions—actions of thought. How they can be transformed to these is, indeed, a problem which shall remain unsolved to the end of time ; and I believe that if to-day an angel from heaven came and explained all to us our understandings would not even be able to comprehend it."

The second Annual Report of the Ontario Provincial Board of Health (420 pages) reflects great credit upon its compilers. Especially Part III., comprising papers read before various literary and sanitary societies, is well worth perusal. Pamphlet No. 14 (page 204), " Directions for preventing the spread of Asiatic cholera " ought to be carefully read by every medical man.

Dr. Henry Howard does not believe in the freedom of the will, and consequently that man is responsible for and can control his thoughts, words and deeds. Nearly a thousand years ago wrote Omar Khayyam, the Persian Poet, in a similar strain :

"O Thou, who didst with pitfall and with gin
Beset the road I was to wander in,
Thou will not with Predestined Evil round
Enmesh, and then impute my Fall to Sin!

Oh, Thou, who man of baser earth didst make,
And ev'n with Paradise devise the snake,
For all the sin wherewith the face of man,
Is blackened—man's forgiveness give—and take.

P. A. Laver, M.D.

Montreal, July 26, 1884.

College of Physicians and Surgeons,

PROVINCE OF QUEBEC.

PROVINCIAL MEDICAL BOARD.

Semi-Annual Meeting.

THE SEMI-ANNUAL MEETING of the Board of Governors (Provincial Medical Board) of the College of Physicians and Surgeons of the Province of Quebec will be held on

WEDNESDAY, the 24th September next, at 10 a.m., in the Laval University, Quebec.

Candidates for examination or for License must send their papers (including certificates of admission to the study of Medicine), also the fee for the license, $20, *at least ten days previous to the meeting*, to either of the undersigned Secretaries. Graduates must be present, and have their Diploma with them.

A. G. BELLEAU, M.D., QUEBEC.
F. WAYLAND CAMPBELL, M.D., MONTREAL.

MONTREAL, 24th August, 1884.

College of Physicians and Surgeons,

PROVINCE OF QUEBEC.

PROVINCIAL MEDICAL BOARD.

Preliminary Examination for Admission to the study of Medicine.

THE EXAMINATION for admission to the study of Medicine will be held on

THURSDAY, the 18th September next, at 9 o'clock, a.m., in the City of Quebec, at the Laval University.

Certificates of moral character and the examination fee, $10, must be remitted *at least ten days previously* to one of the undersigned Secretaries.

A. G. BELLEAU, M.D., QUEBEC.
F. WAYLAND CAMPBELL, M.D., MONTREAL.

MONTREAL, 24th August, 1884.

THE CANADA MEDICAL RECORD.

VOL. XII. MONTREAL, SEPTEMBER, 1884. No. 12

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Original Communications.

EARLY PARACENTESIS OF THE MEMBRANA TYMPANI IN THE TREATMENT OF ACUTE NON-SUPPURATIVE AND SUPPURATIVE CATARRH OF THE MIDDLE EAR.

BY A. PROUDFOOT, M.D.

Lecturer on Diseases of the Eye, Ear and Throat, Bishop's College, Oculist and Aurist to the Western Hospital, Montreal Dispensary and Infant's Home.

Read before The Canadian Medical Association, Aug. 26th, 1884.

Nothwithstanding that this operation was introduced by Sir Astly Cooper over eighty years ago I find that there still exists a popular belief among the laity, and even among otherwise well informed physicians, that perforation of the membrana tympani is necessarily followed by almost hopeless deafness.

I will therefore endeavor to show by this short paper, not only that this belief is erroneous, but that paracentesis is in itself a comparatively harmless operation. And that in its *early* performance we have, in cases of acute non-suppurative and suppurative catarrh of the middle ear, a most valuable and reliable means, not only of relieving the sufferings of the patient, but of cutting short the attack, and bringing about a favorable termination of the disease.

In 1801 Sir Astly Cooper introduced the operation to the profession by the report of four successful cases, before the Royal Society in London. The publication of these cases by the great British surgeon soon led to its performance by many surgeons upon the continent, and the operation became so fashionable that almost everyone whose hearing was at all impaired had his drums pierced, and even deaf mutes submitted to the operation. Cooper was so over-run with deaf patients that after performing the operation some fifty times, where the benefit was either nil or of but short duration, and finding that his reputation as a surgeon was suffering, finally refused to treat any more deaf people.

The only rule which Sir A. Cooper laid down for the operation was closure of the eustachian tubes, preventing the free passage of air into the tympanum:

1st. By a common cold producing congestion about the orifice of the tubes in the pharynx.

2nd. Ulceration of the pharynx from,

(*a.*) Scarlet fever.

(*b.*) Syphilis. The resulting cicatrix causing closure of the tubes.

3rd. Extravasation of blood into the tympanum.

These observations of the great surgeon are wonderfully correct, when we consider that the valsalva method was the only means then known of proving the permeabilty of the eustachian tubes.

First let us consider those cases of acute non-suppurative inflammation of the middle ear with accumulation of mucus or serum within the tympanum.

SYMPTOMS.—Ear-ache, fullness, throbbing sensation referred to the deep structure of the ear and tinnitus aurium.

On inspection the membrana tympani will generally be found congested, vascular and some-

what bulged outwards, and the hearing is more or less impaired. In most cases the throat is sore and the pharynx deeply congested. Usually in this disease pain is the first symptom complained of; but previous to its setting in the patient may have been aware of a certain fullness in the ears, with slight dullness of hearing, and perhaps a certain stiffness about the muscles of the throat. The pain may vary very much in different persons; in some cases I have seen the disease go on to suppuration, without being severe enough to prevent the patient from attending to his business, while in others (usually those of a nervous temperament) the pain has become so severe in a few hours as to cause even a strong man to cry like a child. Fever is a prominent symptom in this disease, and the temperature may rise above one hundred degrees, (100.)

Causes.—Among the causes of this disease may be mentioned cold, the introduction of water into the external meatus while swimming (especially salt water), coryza, small-pox, scarlet fever and measles, the accidental introduction of water into the middle ear by the use of the nasal douche or other means.

In the treatment of this severe form of inflammation we have first to relieve the pain, reduce fever, and, if possible, prevent the extension of the disease to that more severe type, acute suppuration of the middle ear, with spontaneous perforation of the membrana tympani.

For the relief of pain, especially in children, perhaps no remedy will give more relief than a continuous stream of (not warm water), but water just as hot as can be introduced into the meatus without scalding the patient. The best method of introducing the water is by means of an aural douche. A syphon formed by a piece of small elastic tubing will answer the purpose very well.

Should the injection of hot water and the administration of a full dose of morphia prove insufficient to give relief we must then have recourse to the local abstraction of blood. This may be accomplished by leeches applied to the tragus, or by Hortloupe's artificial leech. But the treatment which, in my hands, has proved the most successful and satisfactory is paracentesis of the membrana tympani.

Therefore, in every case of acute inflammation of the middle ear, in which the pain does not immediately yield to hot water and a full dose of morphia, say ⅓ to ½ a gr., for an adult, and where the membrane is red, swollen and prominent, I consider it but loss of time to employ other means for the abstraction of blood,—I at once puncture the membrane.

A case which will not yield to the above-named remedies, will, in all probability, cause spontaneous rupture of the membrane. Why not anticipate this by a neat puncture? It will at once relieve the tension of the parts, by the flow of blood from the membrane, and the escape of mucous or other fluids from the tympanic cavity.

The pain experienced during the operation is trifling, and the relief almost instantaneous. The bleeding should be encouraged by the warm water douche, which may be used from time to time, should there be any recurrence of the pain. And here let me remark, that I do not approve of the application of poultices, which are so commonly used in these cases. The chief thing to be dreaded in these acute cases is the formation of pus, and I have no hesitation in saying that they are almost sure to bring this about. Poultices should only be used as a "dernier resort," and, when used, they should be small enough to be introduced some distance into the meatus. If there is tenderness over the mastoid process a poultice may be placed over it, too, but it should never be placed over the auricle, as it is apt to produce painful swelling in that region.

The following cases, the result of causes before mentioned, will illustrate the beneficial results of an early puncture of the membrana tympani: 1st From Cold.—C. B, æt 27, went for a long drive during the afternoon, and, as the day was mild, he substituted a felt hat for the fur cap he had been previously wearing. During the following night he experienced the most excruciating pain in the right ear, for which he dropped warm laudanum into the ear. This gave him very little relief, and he was unable to sleep during the remainder of the night. In the morning, when he consulted me, he was still suffering so as to scarcely be able to keep quiet, while I examined the ear. I found the membrana tympani very red, swollen, and bulging outwards. For treatment I used Politzer's bag, and finding that there was no perceptible change in the shape of the membrane I immediately perforated it in the lower posterior segment, close to the handle of the malleus. The pain was somewhat increased at the moment the puncture was made, but, after the escape of a few drops of blood and mucus, the pain was almost instantaneously re-

lieved. In this case it was not found necessary to give an opiate ; there was some return of pain the first night, but it readily yielded to the hot-water treatment. After the second day the membrana was quite healed, the Eustachian tube became pervious, and the patient recovered without any diminution in the hearing.

2ND CASE.—Introduction of water into the meatus while swimming. J. H., æt 18, while swimming at Lachine got some water into the right ear, which he was unable to remove. The first night he experienced no particular inconvenience, except that he was slightly deaf of that ear. The following day the water ran out and he thought no more of the matter, until he was seized with pain in the ear, for which he introduced cotton, saturated with St. Jacob's Oil, which, as may be supposed, only increased his sufferings. The following day he came to me for treatment. I found the whole meatus somewhat inflamed from the St. Jacob's Oil, the membrana was red, vascular and swollen. The patient was unable to inflate the tympanum by the Valsalva method. I introduced the eustachian catheter and injected some air, but with no relief to the patient. I then perforated the membrana in its most prominent part ; this was followed by a flow of thin, watery blood from the meatus. The tympanum was then freed from mucus by the Politzer bag, the meatus dried with absorbent cotton, and then moistened with a ten-grain solution of Argent. Nitr.

The patient was instructed how to practice the Valsalva method, should any fullness or pain recur in the ear. By the third day the membrana was quite healed, and the patient gradually recovered his hearing.

3RD CASE.—From corysa. Miss C., æt. 22, stated that she had been subject to frequent colds in the head, during which times she was occasionally annoyed by slight attacks of deafness, and shooting pains in the ears. During the last five or six days she had been suffering intensely, from what her physician called neuralgia in the left ear ; and for which he prescribed laudanum and sweet oil, to be dropped into the ear. Finding that this treatment did not give the desired relief, and that the patient's sufferings were increasing, he advised her to put herself under my care. I found the membrana very congested and quite prominent. There was hypertrophy of the left tonsil and closure of the eustachian tube. I immediately perforated the membrana tympani. The patient experienced considerable pain at the moment and immediately fainted, but soon regained consciousness though she remained dizzy for some minutes afterwards. A drop or two of muco-pus appeared upon the edge of the wound the following day, but this was removed and the part touched with a twenty grain solution of argent nitre. In a week the perforation was quite healed, and there was no return of the pain. When I last saw this patient she was slightly deaf on the left side, probably from pressure of the tonsil on the orifice of the eustachian tube. I advised her to have the tonsil excised, but she did not submit to the operation.

4TH CASE—From scarlet fever. E. P., æt. 10, a month ago had scarlet fever with slight attacks of deafness. Her family physician advised her mother to call me in should the deafness continue. When I was called to see the child, her mother informed me that they had all been kept awake the previous night by the sufferings of the child. Although they had tried everything they could think of to relieve the pain in her ear, warm water seemed to be the only thing that gave her any relief. I found the membrana of the left ear greatly inflamed and bulging at one point, as if it were about to burst. And as the child was still suffering intensely from the pain I punctured the membrana, and encouraged the bleeding by injecting warm water, and in a few minutes I had the satisfaction of seeing the child almost free from pain.

I had to follow up the treatment in this case, by the daily use of Politzer's bag, and the child made a perfect recovery.

I have had many cases similar to the above, after measles, but never one the result of small-pox.

I will now give one or two cases in which I perforated the membrana tympani in acute suppurtive disease of the middle ear :

Case 1—J. H., æt 45, had suffered for some time from offensive nasal catarrh, for which he was in the habit of using a nasal douche with weak solutions of salt and water. He stated that the day before he had been using the douche, and had accidentally forced some of the solution up the eustachian tube into the right ear. Before morning he was attacked with severe pain in the ear. On examination I found the membrana bulging, and as it still retained its transparency I thought I could detect the shadow of a thick fluid, probably pus, which slowly changed its position on movement of the head forwards and backwards. The

skin over the mastoid process was decidedly red, and there was marked tenderness, when the process was percussed with the point of the index finger. I diagnosed the case as one of acute suppuration of the middle ear, and proceeded to make a large perforation in the membrana, which was followed by the escape of a few drops of pus—I then used Politzer's bag, repeatedly, until I had removed all the pus possible, from the cavity of the tympanum: I then ordered the patient a gargle of alum water, instructed him to syringe the ear several times a day, if necessary in order to keep it free from discharge, and to drop into the ear a four grain solution of sulphate of zinc. To apply ice over the mastoid process as long as any redness or tenderness remained.

I gave the patient 1-3 gr. of sulphate of morphia for the first few nights, to insure sleep. The patient came to me daily, for three weeks, when I used Politzer's bag, and thoroughly removed all pus from the tympanum, and then applied a 20 gr. solution of argent nitre. By this time the discharge, which had been very profuse, ceased, the membrane healed, and the patient shortly afterwards had his hearing quite restored.

Case 2—Mrs. C., æt. 35, had been suffering more or less for ten days before consulting me with pain in the left ear and over the side of the head. Her family physician had prescribed large doses of morphia, and she had herself employed dry heat by means of a small bag of hot salt, which she found gave her some relief, but the throbbing and pain had increased until it had become almost unbearable. Her physician finally advised her to come to me, telling her that he did not know much about the ear. I found the walls of the external auditory canal somewhat swollen, and the membrana much inflamed; the mastoid process was also adematous and painful.

I at once punctured the membrana, and followed precisely the same treatment as in the first case.

The patient experienced almost immediate relief from pain, and, although the ear was tender for a few days, she was able to sleep after the first night without an opiate, and in a month she quite recovered without the loss of hearing. I might go on and relate other cases, but I think that those which I have mentioned will suffice.

Within the last twelve years I have performed this operation a great many times, both in public and private practice, and I have yet to see a case where the membrana did not heal after the operation, or where it was not of decided benefit to the patient.

We may regard paracentesis of the membrana in acute inflammation of the middle ear in much the same light as we do iridectomy in glaucoma. It at once relieves the tension of the parts and generally prevents the extension of the disease to the labyrinth, or mastoid cells, which might take place before spontaneous rupture of the membrana could be accomplished by nature. I therefore draw the following conclusions:

First. That paracentesis is not a very painful or formidable operation.

Second. That in it we have a quick, safe and permanent means of relieving the patient, from, probably, the most agonizing pain to which mortal man is subject.

Third. That in it we have a most valuable and reliable means of cutting short the attack and bringing about a favorable termination of the disease.

Fourth. By it we have a valuable means of preventing the extension of the inflammation to the labyrinth and mastoid cells; by affording a free, exit to the pus; and a means of applying our remedies directly to the cavity of the tympanum.

2 Philips Place.

RESULTS IN SOME SURGICAL CASES.

H. S. Cunningham, C.M., M.D., Indianapolis, Indiana, U.S.

1. Gustav Jonas, æt. 12, was kicked over the left eye by a horse. The skull was crushed in. I removed the pieces, leaving an irregular opening about the size of a silver twenty-cent piece. The membranes were intact, the wound heals kindly. There was no elevation of temperature at any time or delirium. He was about in ten days.

2. Mr. J. F., a carpenter by trade, in a fit of emotional insanity cut his throat with a draw-shave. I saw him three days after his attempted suicide, the trachea was almost entirely severed at the third ring from the cracoid cartilage, and the æsophagus was cut into on the right side, sufficient to admit of the spurting forth of a small stream of water at every effort of deglutition. I closed the wound with silver wire, and he completely recovered.

3. John Johnson, æt. 5, inhaled a grain of corn into the trachea. I operated upon him, assisted by my friend, Dr. Max Schiller. He recovered in three weeks.

4. Mrs. C. Hoffman, æt. 78, came under the care of my friend, Dr. Max Schiller, for strangulated femoral hernia. Taxis failed in reducing it. We operated, and returned the gut, but failed to return a large portion of the omentum. We cut off a portion, twisted the vessels, sponged it off, used carbolic spray, and returned it. The patient recovered in six weeks, and is well to-day.

5. Mrs. L. Hoff, suffered from femoral hernia for some years, but never wore a truss; she finally had strangulation, and suffered from great distress and vomiting, for twelve hours before calling for medical aid. Dr. W. B. Fletcher, present superintendent of the State Insane Asylum, assisted me in the operation. She was attending to her household duties in three weeks.

6. Shortly after returning to the U. S. from Montreal, Canada, a young lady, Miss M., called upon me to remove an unusually long steel hair pin from the bladder. She acknowledged having introduced it accidentally through the urethra while masturbating, she using the rounded end; the pin slipped from her fingers in her excitement. I was compelled to cut a small opening through the vagina and bladder to remove it. She recovered in two weeks.

7. Louisa Rapp, æt. 10, was accidentally shot, the calibre being 22; the ball entered the brain at the union of the occipital and parietal bones,—crown of the head. She was shot whilst stooping, the ball ranging backwards and towards the cerebellum evidently, from the position of both parties. The membranes as well as the tables of the skull were perforated; she only remained in bed five (5) days and in doors ten days. She never had any elevation of temperature, no vomiting or convulsions, and to-day—two years after the injury—she is enjoying good health.

Society Proceedings.

MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

Stated Meeting, April 25, 1884.

DR. HENRY HOWARD IN THE CHAIR.

PATHOLOGICAL SPECIMENS.

Dr. R. L. MACDONNELL exhibited a *radius* found in the McGill dissecting-room, shewing an old Colles' fracture; also a *skull*, the parietal bones of which were very thin over the grooves for the middle meningeal artery. This was pointed out to be of medico-legal interest, inasmuch as a moderate blow on the side of the head might produce death by fracture of the bone and perforation of the vessel.

Dr. HENRY HOWARD said that the late Dr. Macdonell saved a cab-driver from the gallows by showing in court that the skull of the person whom he had struck on the head for refusing to pay him was abnormally thin in this region, death being caused as above.

Syphilitic Teeth.—Dr. MacDonnell showed a plaster cast of teeth from a boy who has been under his care for about two years suffering from well-marked symptoms of congenital syphilis.

Dr. SUTHERLAND exhibited the following:—

1. *Monstrosity.*—Drawing of a two-headed fœtus and skeleton of the same from Dr. Mullins of Hamilton. The child (male) had two heads, four arms, and two legs. The skeleton showed two separate vertebral columns converging at the sacrum, and two thoracic cavities, one abdominal.

2. *Hemorrhage into the Cerebellum.*—The right lobe of the cerebellum was torn up by the force of the blood. This specimen was removed from a boy aged 13 years, who, while apparently in good health, was suddenly seized with a convulsive fit, dying almost immediately.

3. *Brain of a Monkey.*—Showing the cerebellum fully covered by the cerebrum.

Dr. Sutherland also showed the *Skull and Brain of an Idiot*, the main features of which were as follows:—Of the skull: The capacity of the cranium comes under the group of microcephalic skulls. The bones of the face are large in comparison with those of the cranium, and slant forward. The horizontal circumferencc taken in a plane passing anteriorly through the ophryon and posteriorly through the occipital point, 17½ inches; arch of the vault from the ophryon to the occipital point, 10 inches; transverse circumference from one auricular point to the other, 10 inches; width between the malar bones, 3 inches. Orbits are comparatively large, 2 × 1½ inches. Superciliary ridges prominent. Nasal septum between them is narrow. The ophryo-alveolo-auricular angle gives a prognathic index. Temporal fossæ are deep, and ridges well marked. Basi-occipital process ascends very obliquely to articulate with the basi-sphenoid. Foramina at the base are comparatively large; the grooves for sinuses comparatively small. The brain has a low contracted appearance, short, greatest transverse diameter

being at the middle of the mass, and having a ratio to the length of 1 to 1½. Far from being concealed, the cerebellum projects behind the cerebrum to the extent of one inch, and forms a fourth part of the whole mass. In the base view the relative preponderance of the cerebellum is again the most striking feature—

Antero-posterior diameter of the cerebrum		5	inches
Hemispheric arch		6	"
Anterior curve (fiss. of frnt. lobe to fiss. Rol.)		3	"
Middle " (fiss. Rol. to par. occip. fiss.)	right side	1	"
	left "	1¼	"
Posterior " (par. occip. to fiss. of occip. lobe)	right "	1¼	"
	left "	1	"

The frontal region is short and pointed; the orbital surface but slightly marked. Temporal convolutions are large, and are continued backwards into the occipital lobes, which are exceedingly small, and cannot be definitely divided into their ordinary number of convolutions. The central lobe is exceedingly small. The parts which can be detected as actual convolutions are: Frontal parietal lobules—temporal, marginal, calloso-marginal, cuneate and præcuneate lobes. Less easily the orbital, occipital and central lobes—triradiate sulcus, corpora-striata and optic thalami. On the right side the fissure of Sylvius is continuous with the post-central and interparietal sulci. On both sides the calcarine fissure is represented by two parallel sulci separated by a ridge of convolutional substance better marked on the right side. Further development of the convolutions above and below would have concealed this ridge and left a single fissure. Cerebellum more highly developed than the cerebrum.

Dr. HENRY HOWARD made the following remarks on the brain demonstrated by Dr. Sutherland:—With your permission, Sir, I will read a copy of a letter I wrote to Dr. Richard MacDonnell bearing date September 16, 1883:

" I have a perfect recollection of the man that you spoke to me of. He was admitted into the asylum as a dangerous imbecile, a man with homicidal tendencies. When I first saw him I was struck with the peculiar shape of the head. It was conical. The apex of the cone appeared to be at the union of the sagittal and lambdoidal sutures. The os frontis ran back as if it formed a part of the point of the cone. The base of the cone was out of all proportion with the face, being nearly twice as large. The head and face formed two lines, and their bases united. The man's eyes were small and gray; he was what you might call pig-eyed. His walk was that of a man with locomotor ataxia. When he came towards you, you felt as if he would run over you.

Physiological symptoms.—He was generally very good-natured, but terribly impulsive; the slightest thing would rouse him into a fury, when he would froth at the mouth, and not be able to utter a word. At the best of times he spoke with hesitation, not impediment of speech.

" I know nothing of what disease he died of. It must have been a sudden death, as I never saw him in the Infirmary, and I see all the patients every week. I have no history of the man before he was admitted into the asylum. In your examination of the brain I would expect you to find the following conditions: Convolutions, particularly in the lateral and anterior portions of the hemispheres, flattened, with irregular and shallow fissures; the cells in their cortical substance (that is, of these convolutions) few and small,—in fact, teratological defect in the whole of the motor and inhibitory nerve centres. And why would I expect you to find this abnormal state? Because the man was a very low order of imbecile, but little intelligence and no power of controlling his impulses. I would expect to find some abnormal state of the Island of Reil, or the convolutions covering it, because of the hesitation in his speech. I would not expect to find much abnormality in the convolutions or gray substance in the posterior lobes of the hemispheres or sensory nerve centres, because I never found any symptoms of either naæsthesia or analgesia. There was such a want of equilibrium in the man's movements, and he was such a victim of impulse, I would expect to find a very abnormal state of the mecensephalon, particularly about the basal ganglia, such as the corpus striatum and optic thalamus. I would expect the cerebellum to be large, and not covered by the posterior lobes of the hemispheres. There may be other abnormalities in the mesencephalon, but those I have mentioned I would expect to find.

Yours always, H. HOWARD."

From the demonstration given you by Dr. Sutherland you will perceive that, guided by experimental and clinical physiology, I made a good diagnosis of the teratological state of this man's brain, so far as the examination has gone, the doctor not having cut into the brain or made a histo-pathological examination of it. I admit that, in diagnosing flat convolutions and shallow sulci, I was as much guided in forming my opinion from the shape of the cranium as I was from the man's peculiar hesitation of speech and conduct. Judging by the frontal and lateral convolutions of the anterior hemisphere, we may easily conclude that there was teratological defect in the Island of Reil. Neuro-pathologists tell us that in the normal brain there are forty-four convolutions, and that sixteen of these are situated in the frontal lobes. In this brain there are only thirty convolutions, and eight of these in the frontal lobes. Mind, at least as we know of it, being a phenomenon or force of matter,

the psychosis must be what the physiology of the matter, of which it is the phenomena or force, makes it. This you have well exemplified in the imbecile's brain before you—the whole mass of the man's brain resembling more the brain of an ourang-outang than that of an ordinary man. It is a hard matter to give a definition of sanity, insanity, and imbecility that would be acceptable to all, particularly to judges that have to adjudicate in criminal cases. The reason is obvious: Some consider the mind to be soul or entity, causa vera; others, like myself, look upon mind, as far as we know it, as a phenomenon or force of matter. What is sanity? I answer, it is an equilibrium of mental forces or phenomena, due to the physiology of physical organisms; and sanity or intelligence differs in degree, depending upon the physiological state of physical organisms. What is insanity? A physical disease, to be diagnosed by the person's psychosis and conduct, due to a loss of equilibrium of mental phenomenæ or forces, the result of pathological defect of physical organisms; and insanity differs in degree, depending upon the greater or lesser degree of the pathological defect of physical organisms. What is imbecility? It is a want of absence of equilibrium of mental phenomena or forces, due to teratological defect of physical organisms. Imbecility differs in degree, depending upon the greater or lesser degree of teratological defect in physical organisms. It is from the imbecile class that we get another class of society, viz., the criminal class, therefore the necessity of having the imbecile class cared for, but separated from society.

You perceive, gentlemen, that physical science naturally leads me to be a physiological psychologist; and I maintain that for physical effect there must be physical cause; therefore, that for all psychical phenomena or force there must be physiological cause. In the brain before you, taken from an imbecile, this truth is fully established. You may ask me, if mind is a phenomenon or force of matter, how is it that mind acts upon matter? I am sure that all nature's forces, which are phenomena of matter, whether organic or inorganic, not only act upon other forces, but react upon the cause. For example, you see it every day. Fire is a phenomenon of matter which acts on the very matter of which it is the force or motive. Atmospheric electricity or lightning is a phenomenon dependent upon the physiological state of the atmosphere. So does mind act upon the very organs of which it is the phenomenon, as well as it acts upon other organs. It is the antagonism of forces, when equal, that creates an equilibrium in nature, and not only in nature, but in our organisms, Therefore, as I have said, sanity is due to an equilibrium of mental forces, and insanity and imbecility to a loss of equilibrium of physical and mental forces. You will understand, then, that when I, or any other physiological psychologist, speak of the locality of the organ of intelligence being situated in the anterior hemispere of the brain, the motor organs in the lateral hemispheres, and the organ of consciousness in the posterior lobes, it is not meant by such statements to imply anything more than nerve centres with particular functions. It is not meant that such centres are independent of one another, or independent of other nerve forces. These terms are used for want of a better that would imply as much. The whole nervous system constitutes mind matter as well as the brain and spinal cord. All centripetal nerve forces, or forces running towards the centre by means of the afferent or sensory nerves, find their centres in the posterior lobes of the cerebrum; therefore this centre is called the organ of consciousness. But, should there arise any abnormal state of these afferent nerves by which the centripetal current would be cut off, there would be, so far, a loss of consciousness although the nerve centre might remain normal. Again, if there was an abnormal state of any of the efferent or motor nerves by which the centrifugal current would be arrested, loss of motion in the peripheral nerve would take place, although the motor nerve centre was in a normal state. So it is with all other nerve centres —the eye, the ear, &c. All nerve centres are dependent upon each other for the perfect working of organic forces, and when all are normal, there is an equilibrium of organic forces, and there is an intellectual man. But when any of these forces are abnormal, then there is a loss of equilibrium of forces, and a consequent loss of intellect to a greater or lesser degree, depending upon the abnormality of the affected organ. This is physiological psychology, or cause for effect, which is vastly different from the psychology of the past, which was based upon the supposition that mind was entity, or causa vera, and not what physical science or experimental philosophy has proved it to be, so far as we have any conception of it, a phenomenon or force of matter.

Our penal code is based upon the dogmatic *a priori* or speculative philosophy, which assumed that mind was entity. Hence the uselessness and absurdity of a physiological psychologist pleading before a judge of a criminal court. The ontological psychologist and the physiological, or experimental psychologist, look upon crime from two different standpoints; therefore they never can come to the same conclusion as to cause and effect.

Since I wrote the foregoing I received the April number of the CANADA MEDICAL AND SURGICAL JOURNAL, and in it perused with great pleasure, and, I hope, profit, a letter from Strasburg, over the signature "T. W. M.," in which the following occurs: "Professor Solly, before, perhaps, the most crowded house of the whole semester, detailed results of his latest experiments on the cerebrum. Solly opposes the theories of Hitzig and Ferrier with the deepest conviction that they are baseless. His results are very striking, and I doubt if it is possible for anyone to see Solly operate, remove a very considerable part of the fore-brain, and then note the results in the dogs, and still believe in the Hitzig-Ferrier localization theories."

You see in my remarks I have been anticipating "T. W. M." who, it appears to me, with Solly, misunderstands these physiological psychologists, Hitzig and Ferrier, and no matter what may be the result in dogs that have had a part of the fore-brain removed, it would be far from settling so important a question. "There may be localization, and this Solly admits, but not as we have heard of it as yet." Most undoubtedly there is localization, but not in the manner that Solly is looking for it; when he takes a wider view of the physical phenomena of force he will find it. Again, "T. W. M." says, many suppose the localization hypothesis derives powerful support from clinics and pathology, from symptoms and morbid anatomy." Most undoubtedly there are many who believe it, and with good reason; see the brain before us this evening; morbid anatomy confirms the truth of the opinions formed from symptoms and clinical observations. No doubt but that there has been some wild writing upon the localization hypothesis, and that great misunderstanding has arisen from our terminology, nevertheless there must be physical cause for physical effect, and the effect must depend upon the physiology of matter, and our duty is, where we see effect, to search for, and, if possible, find out cause.

Stated Meeting, May 9, 1884.

T. A. RODGER, M.D., PRESIDENT, IN THE CHAIR.

The following pathological specimens were exhibited:—

Aneurism of the descending Aorta—Erosion of Vertebræ—Pressure on Left Bronchus—Carnified Left Lung. Dr. GEO. ROSS exhibited the specimen and narrated the case.

The specimen consisted of a large aneurismal sac, occupying the descending portion of the thoracic aorta. The posterior wall of the pouch had been absorbed, and laid bare the bodies of several dorsal vertebræ, which were also considerably eroded. The left bronchus had been compressed, and the corresponding lung was airless and carnified. The aortic segments presented a sclerosed and contracted appearance, and were inefficient. The lining membrane of the aortic arch extensively atheromatous.

The history of the case began with an attack of acute left-sided pleurisy more than two years ago, for which he had been attended by Dr. Ross. Physical examination at that time showed only the usual signs of pleuritic inflammation, and of incompetency of aortic valves, with consecutive changes in the left side of the heart. Aneurism was not suspected. A year later he consulted Dr. Blackader, who referred him to Dr. Ross once more, he believing that further organic disease existed. After recovering from his pleurisy, the patient had continued to suffer from persistent pain in the left side of the chest, and shortness of breath had become aggravated. Physical signs were: dullness over whole left lung, and respiratory sounds distant and feeble over same area. Double basic cardiac murmur. Tracheal traction evident. Aortic aneurism diagnosticated. Subsequently there were developed well-marked neuralgia of 5th, 6th and 9th intercostal nerves, which could be traced out by exquisite superficial tenderness; also a remarkably strong, heaving pulsation at the xyphoid and neighboring parts, apparently lifting the heart itself against the chest. The addition of these signs allowed the aneurism to be placed with certainty in the descending part of the aorta. He died with symptoms of bronchitis and increasing asphyxia.

Cast from Membranous Dysmenorrhœa.—Dr. GURD exhibited what he thought might be a cast from a case of membranous dysmenorrhœa. The specimen was quite fresh, having been ejected from the vagina that morning. The patient, æt

25, has been married two years; no children. For past seven years has suffered greatly during menstruation, but says what she lost has always been fluid blood with the exception of one occasion, about a year ago, when, after "missing" three months, and while at the water-closet, felt as if some small mass had come away. During the night before expelling the above cast, patient had had agonising pains for several hours. She had not seen anything for two months. The cast was the shape of the interior of the uterus, and weighed about three drachms. It was of a soft, membranous consistence, and easily torn.

Dr. TRENHOLME thought, from the history of the case and from its appearance, it was the decidua of conception.

Dr. GURD mentioned that the appearance exactly corresponded with what Dr. Thomas of New York describes as being a true membranous dysmenorrhœa cast, viz.: "External face soft and irregular, with perforations answering to opening of the utricular follicles. Inner face smooth, and feeling like mucous membrane."

Dr. GARDNER said that it did not look like the product of conception.

The specimen was referred to Dr. Wilkins for microscopical examination.

Ovariotomy—Removal of Pelvic Tumor containing Pus—Death forty-four hours after.—Dr. GARDNER exhibited the tumor, and a bottle of the pus, which was odorless. Patient was unmarried, æt. 21, from the country, and with history of good health up to December last. Eight weeks ago became ill, feverish, and had repeated rigors. In the evening would have a rigor and temperature of 103°. A tumor about size of gravid uterus, at fifth month, was noticed in the left iliac region, rounded, smooth, elastic, and not sore. She became emaciated. Her physician diagnosed a suppurated ovarian tumor. On examination, the uterus was felt anteverted and immovable. The sound entered 2½ in. Roof of vagina was encroached upon by the growth. Operated last Wednesday; it was very tedious, as there were adhesions all around to the pelvis. By tapping, 32 oz. of odorless pus came away. Over the surface of the tumor was a much dilated fallopian tube. The hemorrhage was difficult to control. Patient died after 44 hours. It was either a dermoid cyst lighted up to activity or an ordinary ovarian tumor, the sac of which had suppurated.

Interrupted Menstruation.— Dr. GARDNER said that lately he had seen, in consultation, a lady, aged about 43, who has commenced menstruating regularly after an interval of 14 years. During her early married life she had three children, after which her husband became morally insane, was morose, and lost all affection for wife and children. She was obliged to leave him. The return of the flow excited fears of malignant disease or tumor. Examination showed nothing wrong, except slight hyperplasia of the uterus.

Progress of Science.

WHAT IS MEANT BY NERVOUS PROSTRATION.

By ROBERTS BARTHOLOW, M.D., LL.D.

Professor of Materia Medica and General Therapeutics, in the Jefferson Medical College, of Philadelphia.

[Read before the Philadelphia County Medical Society]

The popular conception of the condition now known as "nervous prostration" is a state of debility in which nervous derangements predominate. A man actively engaged in business or in public life presently finds himself unequal to his daily tasks; he suffers odd sensations in his head; his digestion is disordered; he is weak; wakefulness, mental depression, and a thousand and one new sensations of strange character and fearful portent are superadded. The unfortunate subject of these ills now recoils from his work, gives himself up to the consideration of his symptoms, and relaxes his hold on the interests and occupations of his life. All the world declares he has "nervous prostration," and this explanation satisfies. Physicians say "neurasthenia" or "hypochondria," according to their habits of mind or their training. Sometimes this condition is called the "American Disease." Indeed, there is a general notion, widely prevalent, that neurasthenia is a peculiarly American malady. The late Dr. Beard was the apostle of this dispensation, and he not only was noisy and persistent in his advocacy of that view, but claimed, indeed, to have first clearly defined neurasthenia, and to have classed under this designation the numerous symptoms pertaining thereto. If we cannot admit Dr. Beard's claim in its entirety, if we experience repulsion at his tremendous but unconscious egotism, we are still compelled to acknowledge that his work in this connection is the most important that has appeared. He was peculiarly fitted to differentiate this malady, by reason of the quickness and acuteness of his intellect, his power of analysis in its subtlest aspects, and his far-reaching, his omnivorous faculty for related facts.

The term *neurasthenia*, advocated by Beard, is by no means of recent origin. The corresponding French word used in the same sense as we now employ it, has been a stock word of French neurological medicine for fifty years. Under the terms spinal irritation, hysteria, hypochondriasis, the nervous state, etc., symptoms of the same character as those now included in the word neurasthenia have been described. Besides the general state, similar derangements of functions of particular organs have been separately considered as palpitation of the heart, headache, flatulence, impotence, etc. In the word neurasthenia—popularly, nervous prostration—the whole morbid complexus is included. The question I have to consider is whether this is a real, a substantive disorder. Are the notions now generally entertained about it founded on true conception of the condition?

I need not enlarge on the importance of a correct understanding of a morbid state which is supposed to be due to the conditions of modern, especially of American, life. Without stopping now to question the soundness of the prevailing doctrine I will place before you the clinical history of two cases, representative of the two types of neurasthenia. These may be designated respectively as the *congestive* and the *anæmic* varieties. The latter are greatly more numerous, but the former are not uncommon, as Beard admits.

Case 1.—The Congestive Type.

Mr.——, æt. 44, president of one of the largest railroad corporations of the West. He is now a robust man, 5 feet 10 inches in height, 196 pounds in weight, and has a very dark complexion, his type of constitution being the so-called bilio-nervo-sanguineous. Beginning his career at an early age, in a subordinate position, he has, by force of a superior intellect and of a physique that no labor could subdue, risen to the highest office, and now controls vast interests. Ambitious, enterprising, resolute, he has carried these faculties into all his work, and has shrunk from no tasks, however severe—from no responsibility, however onerous. As he has risen in position, social engagements have also added to his burdens. His mode of life has changed to some extent. His habits have become more sedentary, although diversified by frequent railroad journeys; the pleasures of the table, including wine-drinking and late suppers, have been more and more indulged in; excessive smoking has been added to these indulgences; and thus, whilst his physical powers have been slowly impaired by bad hygiene, the demands on his mental powers have increased. Extensive interests, uncertain, often precarious, business arrangements, and the incessant watchfulness required when vast combinations may be wrecked through failure at any point, demand the highest use of every faculty; and thus to work is added worry.

Three years ago Mr.——observed that he was not feeling well, and that he could not work as before. He became dull, especially after meals, had a constant headache, dizziness and throbbing of the temples; he applied his mind with difficulty, and all of the head symptoms were increased by the efforts made; he had a good, rather a keen, appetite; a heavily-coated tongue, flatulence, constipation, and some colic pains. The bladder was rather irritable, especially at night; sexual inclination had declined, with lessened power, and various ill-defined but annoying sensations were felt about the penis, scrotum and perineum. During the first year the symptoms increased; the attacks of vertigo were sometimes very severe, so that he had to support himself for a moment to save him from falling. On several occasions he became very much dazed, even lost consciousness momentarily, and once wandered some distance from the proper route he was taking. Anomalous sensations of creeping and crawling, coldness and tingling, and often a burning heat, were felt in the scalp; sudden detonation in the centre of the head apparently; buzzing and singing in the ears, and very constant headache, were also experienced. In the extremities, the tongue and the genitals there were felt peculiar tingling, numbness, coldness, creeping and similar sensations. During the whole time of the existence of his symptoms Mr. —— suffered from depression of spirits, a deep melancholy in fact, and he lived in constant apprehension of failure of mind.

Physicians whom he consulted in the West located the malady in the brain, diagnosticated cerebral hyperæmia, the prelude to softening.

When Mr. —— came to see me, sixteen months ago, the symptoms just detailed continued, and were rather increased than diminished. The objective examination furnished the following details:—

His face is full, the eyelids puffy, and the lower lid swollen into a bag; the conjunctivæ are injected, the sclerotic muddy, and the pupil sluggish in movement. On opthalmoscopic examination, the fundus is seen to be injected, small vessels prominent, veins swollen. There is no optical defect, except that due to his age. The membrana tympani is also rather deeply red, and vessels too small to be seen under ordinary circumstances are now in view. Hearing is unaffected.

Motility, sensibility—the tactile, pain and temperature senses—are unaffected; and the reflexes remain normal, although probably a little sluggish. The electrical reactions are normal.

His tongue is heavily coated, the breath foul. His appetite is good, but a sense of fullness at the epigastrium persists for several hours after meals; acidity and eructations of rather foul gas now and then occur. The stools have the normal appearance, consistence, color and odor. The urine is copious, acid, specific gravity rather high (1.025-to 1.030), and there are traces of sugar, as is usual under such circumstances.

The action of the heart is good, the pulse regular, the tension of the vessel rather high. The

respiratory movements and murmurs are normal. The area of hepatic dullness is rather enlarged and the splenic dullness seems also to be increased.

Subjectively the following symptoms are experienced: Various strange sensations in the scalp, a persistent headache, blurred vision at times, vertiginous feelings occurring irregularly and of varying severity, despondency, vague apprehensions, fear of places—especially of crowded assemblages, difficulty of deciding questions—very trivial or otherwise—in place of former promptness, impaired memory for persons, names and things.

Notwithstanding this extended list of symptoms Mr.—did not have an ill look, but, on the contrary, on superficial examination, appeared to be robust. To him and to his immediate family the situation seemed in a high degree alarming. The surrender of his position and his business interests was regarded as imminent. To the apprehension awakened by his head symptoms was added the diagnosis of cerebral congestion, and hence the profound melancholy into which he was plunged.

Commentary.—My conclusion was that the disturbance in the functions of the brain and nervous system were secondary to derangement of the assimilative processes—of the primary and secondary assimilation—and that to the functional disorder thus caused are added the effects of introspection, and the realization by the centres of conscious impressions to an unusual extent, of ordinary peripheral excitations. My reasons for coming to this conclusion will appear hereafter. The remedies consisted in a careful regulation of the diet, in baths, exercise, in a reduction of the hours devoted to work, but not the cessation of work; in the use of a laxative quantity of sodium phosphate daily, and in the administration of the aqueous extract of ergot, with the chloride of gold and sodium, and a minute quantity of bichloride of mercury. If time and space would allow, the details of hygienic management—so important in these cases—could very profitably, I think, occupy our attention. But I must pass on to the next case.

Case II.—The Anæmic Type.

Mr. ——, æt. 56; a lawyer by profession. His type of somatic constitution is the nervous-sanguine; weight, 145; height, 5 feet 9 inches. He has immense mental energy, extraordinary quickness of perception, a capital logical and critical faculty, and fine oratorical power. These native abilities, conjoined with extensive cultivation, soon placed him amongst the foremost men at the bar of the city where he practised, and have long maintained him in that position. For many years he has been a dyspeptic, and suffered much from eructations of gas, from acidity and flatulence. At times—months, even years intervening—he has experienced very severe seizures, accompanied by extreme mental depression, alternating with as extreme mental exaltation. During the past five years he has had two attacks of gout, neither severe nor protracted. During the whole course of his professional life he has sustained no reverses, encountered no other anxieties than those of a successful lawyer, and has been rather singularly free, indeed, from the worries of life. Receiving last summer the nomination as a candidate to an important office, this cultivated gentleman, scholar and lawyer, this man of nice tastes and high tone, entered on a canvass marked by vituperation and slander to an unusual extent. About the same time some business interests became entangled, and caused no little worry. During the campaign he visited some malarious districts, and spoke several times at night in the open air. A speaker of great readiness and power, he never suffered from any considerable fatigue after public speaking, and hence he was now surprised to find himself exceedingly tired after even a brief effort. He began to have drenching night sweats, lost his appetite, grew weak, and was compelled to return home. It was then ascertained that he had malarial fever, and was treated accordingly. But at this time, and subsequently, symptoms not necessarily of malarial origin appeared. He became frightfully dyspeptic, had enormous eructations of gas, and very considerable flatulence; his arms and legs had a numb feeling, attended with "pins and needles;" he walked with some difficulty, partly because of weakness; she was somnolent and slept a good deal, and his spirits were extremely depressed, especially on awaking in the morning. During these periods of depression he was so overwhelmed with despondency that he was apprehensive he would lose his self-control entirely.

When he placed himself under my charge he had still a slight daily paroxysm of fever, the exacerbation occurring in the morning; but this disappeared in a few days, under the action of some efficient doses of quinine. He was very weak, pallid and emaciated, and slept a good deal of the time. He had no headache; his vision was rather dull, and ideas and speech slow. Every morning, on awaking, he was profoundly melancholic, and all the annoyances which the campaign had developed were gone over in his mind. He could talk of nothing else, think of nothing else, than his ill-feelings, and the disagreeable political and personal slanders of which he had been made the victim. He complained much of the numbness of his hands, of weakness in the limbs; and he talked incessantly of his depressed feelings. The bladder became irritable, and he was compelled to rise every two or three hours during the night, the urine being acid, and depositing heavily of uric acid. Presently the somnolence was displaced by insomnia, and he slept less and less, and rose in the morning haggard, exhausted, and horribly nervous and depressed. Ordinary hypnotics proved unequal to the effort to force sleep, and increasing doses of chloral became necessary. His mental activity, heretofore so remarkable, declined, and the effort to force his mind to the performance of any work, such as letter-writing, caused a sensa-

tion of fatigue. He also became undecided, even in small matters; ceased to have any inclination to go out and mingle with the public, and grew more and more averse to political movements. He reached a point, finally, when to meet strangers caused him great distress, excited the circulation, and induced a cold sweat.

As it became indispensable that he should resume the canvass, he made a strong effort, and, notwithstanding the fatigue, mental and moral depression, and exposure of public speaking, hand-shaking, and other matters of political expediency, he actually improved somewhat. The insomnia, irritable bladder and hypochondriasis, however, continued, but to a less degree. In a few weeks, by means, chiefly hygienical, I succeeded in stopping the chloral; natural sleep was resumed, although it remained somewhat fitful. Suitable dietetic regulations, baths, exercise and medicines, *pro re nata*, removed, or at least greatly modified the principal symptoms. Two weeks at Atlantic City accomplished no little good, and when he return to Philadelphia last week he appeared to be nearly his old self.

COMMENTARY:—In this case we have exhibited that complexus of symptoms entitled neurasthenia or nervous prostration in its anæmic form, produced by several factors—moral and somatic. The moral were very influential, but, unless the conditions producing bodily depression had occurred, the former cases could hardly have effected such results. Long-standing dyspepsia had prepared the way; malarial intoxication and fatigue contributed an important series of changes, and upon this weakened bodily state were precipitated crushing moral influences.

These cases, whose histories I have just read, are typical—each is the representative of a group. The causes are complex; the effects are not limited to one organ, or set of organs, but involve the system in general. To name this malady from the disturbance in one's system seems to be an error unless the definition is sufficiently elastic to include all the functions affected. Neurasthenia names one, only, of the parts involved. To entitle this the "American Disease" is a strange misnomer. It might, with more propriety, be called the "French Disease," for a condition known as the "nervous state," as "nervism," as "neurasthenia," and similar terms, has been recognized and frequently described by French writers from an early period in this century. In France have existed the causes in the most influential form. The frequent political convulsions, the exacting social life of the great cities, and the harassing struggle for existence, inseparable from the state of the great mass of the population, induce, if any mere external conditions can, that which is called nervous exhaustion. There are two factors supposed to be especially influential in this country—work, and our exciting political and social life. I believe that the effect of these is greatly overrated.

The brain, of all the organs of the body, illustrates in the most perfect manner that which has been happily styled "the principle of least action;" that is, to execute given tasks, it expends the least possible force, or, to express the same idea in another form, its work is done with ease, with the minimum of effort. Given a certain amount of repose (sleep), and supplied with proper nutriment (healthy blood) the brain will do its allotted work continuously during its working (the waking) hours. So far from being injured by severe labor, carried on under normal conditions, the brain is improved by it. Mental activity, like muscular exercise, keeps the brain in a healthy state. When, therefore, a man says he is suffering from the effects of mental overwork, I want to know what his vices are. Worry may be one of these; worry is exhausting. The worries of life do infinitely more harm than the work of life, how onerous, soever, it may be. The cases I have just read illustrate this.

I deny that life is more exciting on this side of the Atlantic. The one prize of life is money, and to get possession of it is the supreme purpose, to the attainment of which every energy is put forth. Is it less so elsewhere? Who are the people that despise money and make no effort to obtain it? Here life is less exciting, because our political condition is stable, and but comparatively little exertion is required to secure a comfortable subsistence. I am speaking now of the mass of the population, and not of the few consumed by ambition for political and social distinction or led by a pitiless greed. It is the very ease and luxury of our American life that causes mischief. It is the indulgence in eating and drinking, the abuse of alcohol and tobacco, sexual excesses, sedentary habits, and too luxurious lives generally, that induce the state of the system called nervous exhaustion. If I had time, each of these should be considered in relation to this subject. In the first case I narrated the pleasures of the table and disordered assimilative functions caused the trouble. In the second case, dyspepsia, malarial toxæmia and unusual fatigue were the pathogenic factors. In both, the effects of these causes were increased by moral influences, in one, the anxieties involved in vast business enterprises; in the other, the excitement of a hot political contest. These moral causes would have no injurious effect, had not the somatic conditions been unfavorable.

I come now to the most difficult part of my subject. I have to answer this important question: Why are the somatic derangements caused by the conditions referred to, in some cases accompanied by the mental and nervous symptoms which belong to neurasthenia? Why do some subjects with indigestion and assimilative disorders, or with the results of dyspepsia and malaria, suffer from the derangements of the mental and nervous functions, and not others? I might here take refuge behind an accepted generalization, and say that the presence or absence of the neurotic type of constitution explained the difference in the result. There is aptness in this explanation, but it is not entirely adequate. There

is a mental condition of great importance, and, unless we comprehend this, we fail to realize all the possibilities of the nervous side of these case. I, however, barely hint at the main points, under these circumstances. Besides, I wish to avoid a too metaphysical discussion of the subject.

In the conduct of life every man who has a position to make or to maintain, exerts a certain moral force to hold himself up to his work. Some men are so happily constituted that they are quite unconscious of the effort and stand in the front, serenely confident. Others are all the time laboring; they feel it and know it, and, like the soldiers of Thomas's corps at the battle of Chicamauga, sorely pressed, now and then looked back, to see whether their grim resolute commander was still behind them with his invincible courage. Men conscious of making the effort to keep up need but little excuse to surrender themselves to their sensations. At the present time nervous prostration is much feared; its symptomatology is a common subject of discussion; and hence, familiar with its character, a man who is arrested in his career by some of the ailments supposed to belong to it, his imagination readily supplies the rest. When a man begins the study of his bodily sensations, having a certain model in his mind, he has little difficulty in filling out the details. All the world knows that when the attention is strongly fixed on an organ of the body, functional disturbances of it ensue, and finally structural changes may be induced. No part of the body is without sensation, even in health. To perceive these sensations the attention needs to be withdrawn from external things and concentrated on the part. Thus it is when the subject of neurasthenia pursues the introspection, he becomes conscious of numerous sensations, which, because now felt for the first time, are new. Under these circumstances, also, the seat of conscious impressions becomes more acutely perceptive. Suggestion adds its quota of symptoms.

To the indefinite and multiplying nervous symptoms developing thus subjectively, must be added the reflex. Headache, vertigo, *tinnitus aurium*, amaurosis, diplopia, hallucinations and illusions, defects of speech, paralysis, are reflex symptoms on the part of the brain; palpitation, intermittent pulse, angina pectoris, laryngismus, stridulus, asthma, are amongst the reflexes of the respiratory organs and heart; neuralgia, anæsthesia, and other disorders of the sensory nerves, and local paralyses, affections of the motor nerves, included amongst the nerve reflexes, may all be dependent on reflex excitations proceeding from the stomach. Indeed, there is no symptom in Beard's catalogue of those belonging to neurasthenia that may not be due to merely reflex influences having their initial seat in the digestive apparatus. It follows that the term neurasthenia, or its common equivalent, nervous prostration, is either inadequate or it expresses too much. Inadequate if the complex of symptoms includes the functional disturbances of all the organs affected, expresses too much if the malady is merely a nervous one.

In reply to the question: "What is meant by nervous prostration?" I respond: a disease usually functional, situated in one or more organs. During the course of which reflex disturbances of the brain occur, and numerous subjective sensations in all parts of the body are realized by the consciousness."

I deny that neurasthenia is a primary nervous affection, or that it is a substantive disease. I hold that is symptomatic and secondary.

This conception fixed in the mind, the treatment of neurasthenia is successful or unsucessful according to the measure of our skill in localizing the initial disturbance and in addressing our remedies to that as well as to the general state. —*The Polyclinic.*

NEW TREATMENT OF ULCER OF THE STOMACH.

Simple ulcer of the stomach, the ulcer of J. Cruveilhier, which is often called the round ulcer, is one of the most rebellious affections to therapeutic measures. Why is it that this *simple* ulcer, as it is called, persists for months and years without cicatrizing? What cause presides over the formation of the ulcer, and what influences preside over its development, its chronic course? If one wishes to give to these questions a truly scientific solution he is obliged to acknowledge that there is something connected with its origin and course, which is still unknown. The theories of thrombosis, embolism, and of inflammation, if they explain the losses of substance, and the ulcerations of the mucous membrane, do not explain the form and characters of the round ulcer. So far as the action of gastric juice is concerned, if it contributes to the progress and extension of the ulcer by a sort of digestion why is this digestion limited so often, and not cause perforation and destruction of the stomach. It would seem that the acid reaction of the gastric fluids has a bad effect since so much good has been done by alkalines and Vichy water.

The treatment of these ulcers is a more simple matter than the pathogenesis. The beneficial effects of strict diet have long been recognized, especially of the milk diet. But there are serious objections to the milk treatment. A person with ulcer of the stomach should take, if put on the milk diet exclusively, three or four quarts of milk every day. This enormous quantity may be well tolerated, and the gastric pains, the vomiting, and hemorrhages may cease. But one cannot with impunity introduce into a sound stomach, much less into one in bad condition, four quarts of liquid a day, without causing dilatation of the stomach. Without doubt, this can be in a manner obviated if the patients be not allowed to take much milk at a time. But the morbid state and atony of the stomach make digestion more slow and difficult. If to this we add the

fact this dilatation of the stomach may cause hemorrhage and perforation of the ulcers, it is easily seen that the milk diet may be a source of great danger.

For a long time M. Debove has paid special attention to means for reducing the quantity of milk ingested. For this purpose he has used concentrated milk and powders of milk, representing, in small volume, considerable quantities of milk. But these have not the nutritive value which is found in meat powders. It has been objected to M. Debove's theory, that the dilatation of the stomach which he attributes to the quantity of the ingesta is due to the affection itself, to the ulcer of the stomach. But, as Bouchard has seen, who has for a long time recommended a dry diet for dilatation of the stomach, and as Debove has also seen, the dilatation disappears under the influence of this regime alone, so that it cannot be due to the ulcer.

The dry diet of M. Bouchard consists in the administration of food very finely divided, or very divisible, as powdered meat or cheese, and at the same time very nutritive. While the amount of dry food is reduced, only a minimum quantity of liquid is allowed, about a pint of water, or wine and water, in twenty-four hours. On this diet the stomach is never distended by food, and the dilatation diminishes or disappears. It is by this dry diet that M. Debove treats ulcer of the stomach; but he adds an important factor to it. Before commencing treatment he washes out the stomach, in order to clear away the mucous, and the *débris* of food which may be there. This washing is done with a rubber tube by the physician himself, as a little carelessness in its use might cause hemorrhage. Duguet has reported a fatal case of hematemesis, caused by the patient attempting to use the tube himself. Debove has never had a case of hemorrhage attributable to the use of the tube, but he very justly remarks that hemorrhages are quite frequent in ulcer of the stomach, and that when the tube brings up "coffee-grounds" blood it cannot be said that the hemorrhage was caused by the washing. If, however, during the washing the liquid brought up has a rosy tint, the operation should be at once suspended.

M. Debove believes that if gastric digestion and the action of the gastric juice can be suspended for some time, the cure of the ulcer will be greatly favored. By rendering the gastric juice alkaline its digestive properties are taken away, and the transformations of albuminoid substances into peptones is stopped. In this manner the matters undigested by the stomach pass into the intestines with an alkaline reaction very favorable to intestinal digestion. Debove has obtained effects which lead him to believe that he can make a patient take ʒ vij of bicarbonate of soda, in three doses, in twenty-four hours. He has shown, by his washings of the stomach, that under the influence of this treatment, the stomach liquids were never acid, and contained no peptones. The patients were given ʒ vjss of meat powder, and ʒ ijss of bicarbonate of soda three times a day. This mixture not being very agreeable to the taste is introduced into the stomach through the tube. To this diet, which represents ʒ lxx of meat and ʒ vijss of bicarbonate of soda a day, is added a quart of milk, taken in small quantities during the day.

The *alkaline cachexia* which Trousseau and other physicians have spoken of was seen in none of Debove's patients. This treatment has given most excellent results, results which have never been attained by any other method of treatment.—*Le Progrès Méd.*

ILLUSTRATIONS OF LOCAL HYSTERIA; WITH REMARKS ON DIAGNOSIS AND TREATMENT.

A paper read at the Annual Meeting of the Lehigh Valley Medical Association.

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I.

Hysteria, from its prevalence, and the difficulties of its diagnosis and treatment will always be to the physician a subject of paramount practical importance. He who aspires to be a neurologist must, among his early achievements, master this great subject. He must learn, in the language of Skey,* that it is a "great malady and not a trivial derangement of the hour."

I will not stop to discuss at length the nature of hysteria. I will simply reiterate what I have said elsewhere,† that it is a disease with an undoubted cerebral pathology. The most striking phenomena of hypnotism can be produced in many of the hysterical; and, according to Heidenhain,‡ the cause of these phenomena lies in the inhibition of the ganglion cells of the cerebral cortex. "Complete abeyance of the supreme functions of the nervous system," says Wilks, § "is one of the most characteristic features of hysteria."

Sir James Paget* says of hysterical patients, that they are as those who are color blind. They say "I cannot;" it looks like "I will not;" but it is "I cannot will." It is my purpose in this paper to bring before you some illustrations of this abeyance of the will, of this inhibition of cerebral ganglionic cells, as exhibited in local hysterical affections, and also to discuss briefly their

*Hysteria, etc. Six lectures delivered to the students of St. Bartholomew's Hospital, 1866. By F. C. Skey, F.R.S., London, 1867.

† Epileptoid Varieties of Hystero-Epilepsy. By Charles K. Mills, M.D. *Journal of Nervous and Mental Disease*, October, 1882.

‡ Animal Magnetism. By Prof. Rudolf Heidenhain. Translated from the German by L. C. Wooldridge, B. Sc., London; C. Kegan Paul & Co., 1880.

§ Lectures on Diseases of the Nervous System. By Samuel Wilks, M. D., F.R.S., Philadelphia: P. Blakiston, Son & Co., 1883.

diagnosis and treatment. These disorders have attracted a large share of attention since Brodie, in his *Lectures Illustrative of Certain Local Nervous Affections*, in 1837 pointed out their comparative frequency, although before his time they were neither unknown nor undescribed.

Various localized phenomena may, of course, be present in any victim of hysteria; but I wish here simply to call attention to those cases which have as a landmark some single local manifestation.

Many illustrations of local hysteria are to be found in one of the works of Laycock, † who discusses neuralgia of the breasts, and of other parts, sweatings and hemorrhages, vomiting, tympanites, dysphagia, hysteric hydrophobia, coughs, deafness, palpitations and pulsations, fits of sneezing, spasm of the glottis, alterations of the voice, hiccough, distortions of expression, pain in the left side, and morbid sensibility of the senses—truly a formidable list; but I believe, with Skey, that every part of the human body supplied with nerves, be they cerebral, spinal, or ganglionic, may become, under provocation, the seat of local symptoms so closely resembling those of the real disease to which that part of the body is liable, as to appear identical with it, and the resemblance to which is so perfect as to deceive the best of us. This author enumerates, as the more common seats of these affections, the female breast, the side of the trunk under the ribs, the whole spinal region from the atlas to the sacrum, any joint, but especially the knee, the stomach, the bladder, and the ovaries, the muscular system of the extremities, and the muscles of the larynx.

Paget advises that the name hysteria should be discarded, at least, from surgery, and proposes for the cases of unwilling imitation of organic disease, the English term "nervous mimicry," or, in untranslated Greek, neuromimesis.

Dr. S. Weir Mitchell* devotes several chapters of his *Lectures on Diseases of the Nervous System, Especially in Women*, to mimetic or local hysterical affections.

Some of the manifestations sometimes classed as local hysterical affections are simply downright frauds practiced by hysterical patients. The nature of others is doubtful. The erratic secretion of urine, for example, has frequently engaged the attention of writers on nervous diseases, and has awakened much controversy. Laycock's position seems to be that the symptom may be real, but usually is simulated.

American hysterics are certainly fastidious about this matter, as I have not yet met, in a considerable experience, with a single example of paruria erratica. It does not require much discernment to see that most of the reported cases are absurd impostures. Charcot† refers, sarcastically, to an American physician who in 1828 gravely reported the case of a woman passing half a gallon of urinous fluid through the ear, in twenty-four hours, at the same time "spirting out" a similar fluid by the navel. He also alludes to the case of Josephine Roulier, who, about 1810, attained great notoriety in France, but was discovered by Boyer to be a fraud. This patient vomited matter containing urea; and shortly after came a flow of urine from the navel, the ears, the eyes, the nipples, and finally, an evacuation of fæcal matters from the mouth.

Hemorrhages from eyes, ears, nostrils, gums, stomach, bowels, etc., have often been observed among the hysterical; these cases sometimes being fraudulent, but sometimes genuine. In the Philadelphia Hospital is now a patient suffering from grave hysteria, vomiting of blood being a prominent symptom. I will detail the case from notes carefully prepared by the resident physician, Dr. Randall.

A. G., æt 19, a dressmaker, was admitted to the Hospital, July 23d. Her body was well formed and nourished. Her eyes were bright and had a peculiar nervous expression. She denied any venereal taint. On the night of her admission she began to spit or rather cough up blood of a bright hue, intermingled with froth, the coughing being accompanied by a peculiar gurgling sound in the throat. Her head was thrown violently from side to side, with convulsive tremors of the extremities, and seeming unconsciousness. On being threatened with a hot iron she became rational. On the following day her menstruation came on, she having previously menstruated on the 12th. Her lungs were carefully examined, but nothing could be discovered; neither could any abrasions of gums or throat be detected.

The hemorrhages were repeated on the 26th and 28th, and were apparently under control of the will, occurring more frequently during the attendance of the resident or attending physician.

On the evening of the 28th she became unconscious, passing into a cataleptoid state. Ice-cold water was applied to her head, and a galvanic current to her back, with the effect of restoring her to consciousness in a few minutes. The hemorrhages of a few ounces of blood have occurred nearly every day until the present time, and have not been visibly affected by hæmostatics which have been used. She has no signs of inflammation, ulceration, or other disease of the stomach.

She is very sensitive over the left ovary, but complains of pain in no other region. Very little food is retained, and yet she does not emaciate. On the night of August 10th she bled profusely from the nose, and at the same time blood was coughed up. In a few minutes she passed into a trance,

* Clinical Lectures on the Nervous Mimicry of Organic Disease. By Sir James Paget, Bart., F.R.S. Lancet, for October, November and December, 1873.

† A Treatise on the Nervous Diseases of Women. By Thomas Laycock, M.D. London, 1840.

* *Lectures on Diseases of the Nervous System, Especially in Women.* By S. Weir Mitchell, M.D. Philadelphia; Henry C. Lea's Son & Co., 1881.

† Lectures on Diseases of the Nervous System, delivered at La Sapêtrière. Translated by Geo. Sigerson, M.D. Philadelphia, H. C. Lea, 1879.

the flow of blood ceasing. All measures failed to arouse her; but pressure over the ovaries produced general convulsions. She remained apparently unconscious for twelve hours, occasionally raising blood. When she awoke she declared that she remembered nothing that had occurred.

Hysterical affections of the larynx are of comparatively frequent occurrence. Thaon* describes four principal forms,—aphonia, spasm, anæsthesia —of each of which I have seen illustrations. Cohen† also describes and discusses most of the hysterical laryngeal disorders in his well-known work.

The following case is of interest, not only because of the aphonia, but because, also, of the loss of the power of whispering. The patient, a young lady of hysterical tendencies, while walking with a friend, stumbled over a loose brick and fell. She got upon her feet, but a moment or two later either fainted or had a cataleptoid attack, from the description given. Several hours later she lost her voice and the power of whispering. She said that she tried to talk but could not form the words.

This condition had persisted, when she first consulted me, for ten months, in spite of treatment by various physicians. She carried with her a pencil and tablet, by means of which she communicated with her friends. She had also suffered with pain in the head, spinal hyperæsthesia and occasional attacks of spasm. Laryngoscopic examination showed bilateral paresis of the vocal muscles, without atrophy. The tongue and lips could be moved normally. She was assured that she could be cured. Faradic applications, with a laryngeal rheophore, were made daily; tonics were administered, and the patient was instructed to begin at once to try to pronounce the letters of the alphabet. In less than a week she became able to whisper letters, and a few days later, words. In three weeks voice and speech were restored.

Just as this patient was recovering, another came to me to be treated for loss of voice. She was markedly aphonic, but could whisper without difficulty. In order to encourage her, I told her that she need not be worried about her loss of voice, as I had another patient who had lost not only her voice but also the ability to whisper, and yet had recovered. To my dismay, the patient returned the next day unable to whisper a single syllable. She made, however, a speedy recovery, under a treatment similar to that instituted for the first patient.

Under the name *apisthyria*, or inability to whisper, several cases of this kind have been reported by Cohen.*

A considerable number of cases of hysterical laryngeal spasm or cough have fallen under my observation. One case, of over two months' duration, was cured by two applications of a weak galvanic current, the cathode being placed on the nape of the neck and the anode above the sternum and along the sterno-cleidomastoid muscle. Whether the result was due to a moral or a physical impression, I am unable to say.

Coughs, variously described as ringing, rasping, grating, barking, etc., are well-known hysterical symptoms.

In lyssophobia, or hysterical hydrophobia, a barking cough is a common symptom. During the past spring a case of this kind was admitted to the Philadelphia Hospital. The patient, a young man, several months before had been bitten by a dog, and had caused a sensation in the community by having attacks which were supposed to be hydrophobia. After admission, at short intervals during the day, he had violent seizures, in which his body was contorted and tossed about, and in which he barked and snapped and sputtered, presumably like a dog. He was taken into the clinic room and lectured upon a certain cure being prognosticated. Orders were also given to burn him on the nape of the neck, with a white-hot iron, on the slightest appearance of spasm or cough. He recovered promptly. When a barking cough is present in a case of supposed hydrophobia, the diagnosis of hysteria may be confidently made.

Hysterical dysphagia is sometimes a dangerous, and always an annoying affection. A young woman was sent to Skey's wards at St. Bartholomew's Hospital, to be treated for difficult deglutition. She had been treated for stricture of the œsophagus. Probangs and bougies had been used, but failed to pass a given spot corresponding with the base of the neck. She had no local pain.

As the obstruction increased, nothing but semi-liquid food passed into her stomach, and this only with difficulty and pain. She became weak and emaciated. In beginning her treatment Skey declined the use of a probang or bougie, and confidently asserted that he would remove the obstruction without the aid of instruments of any kind. He ordered bark, iron, valerian, wine, milk, with brandy —each to be given in the largest quantities at the shortest intervals consistent with reason and moderation; three times in twenty-four hours, enemata of thick soup with an ounce of brandy. In three weeks she was convalescent. She was in high spirits at her recovery, her only vexation arising from the physician's refusal to pass a probang down her throat before she left the hospital. This he peremptorily declined to do, assuring her that a probang of rump steak was a far more efficient test of recovery than any instrument in surgery bearing that name.

A few years since I treated a case of this kind: The patient was an unmarried lady, 40 years old, with a neurotic family history, a maternal uncle and aunt having been insane. At intervals since puberty she had had various hysterical manifestations. After a severe winter, during which she had suffered more or less with rheumatism, she became depressed with reference to her spirit-

* *Edinburgh Medical Journal*, October, 1881.

† Diseases of the Throat and Nasal Passages. By J. Solis Cohen, M.D., New York: Wm. Wood & Co., 1880.

* *Medical and Surgical Reporter*, May 1, 1875.

ual condition—she had, in fact, a form of mild religious melancholia. After this had lasted several weeks, she began to experience difficulty in swallowing. She would rise from the table suddenly, alarmed and gasping, and exclaiming that she could not swallow and was choking. She got so bad that she would not take anything but liquid food, and not nearly enough of this. She believed that her throat was gradually closing, and, of course, suspected cancer. In this case I took a plan the opposite of that followed by Skey, as far as the use of an instrument was concerned. I assured her that if any local obstruction existed I could remove it with one application of a probang.

I also very confidently excluded cancer, placed her upon iron, valerian and quinine, and in a few days returned and passed an instrument down her throat. I refused, however, to repeat this operation, telling her that I was absolutely convinced that she would have no more difficulty. Tonics and full feeding were continued, and in less than a week the difficulty in swallowing had disappeared.

As most cases of real stricture of the œsophagus are cancerous, traumatic, syphilitic or congenital, and as history, cachexia, and the use of instrument of precision, will, in general, readily determine these facts, the diagnosis of hysterical dysphagia is usually not difficult.

A resort to nasal feeding, as practiced in hospitals for the insane, will, sometimes, from its unpleasantness, lead a hysterical case to regain swallowing power, and, at the same time, may be the means of giving her much needed nourishment.

In one group of local hysterias, the presence of pain is the predominating feature. Copland* enumerates the situation in which hysterical pains are most frequently felt, as follows: "*a*, The head, often attended with the clavus hystericus; *b*, below the left mamma, or at the margin of the ribs; *c*, in the region of the stomach and spleen; *d*, in the course of the descending colon, and in the left iliac region; *e*, above the pubis; *f*, in various other parts of the abdomen or in the abdomen generally; *g*, in the region of the kidneys, sometimes extending in the course of the ureters; *h*, in one or more of the dorsal or lumbar vertebræ; *i*, in the sacrum; *k*, in the hip or knee joint. Although these are the most frequent situations, pain may be felt so seriously in others as to alarm the patient, as in the pharynx and larynx, in one or both mammæ, or in the region of the liver." Of these locations, omitting the consideration of headache, the most common seats of hysterical pain, in my experience, are the spine, the breasts and inframammary region, the left iliac, or ovarian region, the sacrum or coccyx and the joints.

Before turning to a few illustrations of special forms of hysterical pain, let me stop for a moment to discuss the nature of hysterical pain in general.

Dr. Charles Fayette Taylor, in a brochure on *Sensation and Pain*,* has given us a condensed philosophical explanation of such pain, drawing largely from Carpenter, Bain, Spencer, Bastian, Maudsley, Tuke, Huxley and others. The pith of the matter is, that many of our sensations are centrally initiated, the memory of previous objective sensations: "Pain is different from ordinary sensations, in that it requires an abnormal condition for its production, and that it cannot be produced without such an abnormal condition. Hence it is impossible to remember pain, because the apparatus does not exist for causing such a sensation as pain after the fact, or when it is to be remembered. Memory is a repetition, in the nerve-centre, of energy which was first caused by the sensory impulse from without. But centrally initiated sensations may be mistaken, in consciousness, for pains, depending wholly on a certain intensity of excitability in the cerebral mass."

The "hysterical spine" is one of the commonest forms of hysterical trouble; in fact, a large percentage of all cases of hysteria complain more or less of spinal irritation. Spinal periostitis, spinal caries and perhaps some cases of spinal meningitis, are organic diseases which may give rise to tenderness on pressure along the spine; but in the vast majority of cases of "spinal irritation," you have to deal with neurasthenic or hysterical patients. So much has already been written about spinal irritation, by Skey, Anstie, Reynolds, Hammond, and a host of others, that I would not take up your time with a reference to the subject were it not that, even yet, almost every week I find practitioners inclined to regard cases as organic spinal trouble, *because* of the presence of great spinal tenderness; whereas, for my part, I regard this symptom as almost diagnostic of the absence of real spinal disease. Faradization of the spine with metallic rheophores, taking sparks from the spine, or the alternate hot and cold douche, with iron, zinc and quinine internally, have proved the most effectual remedies in my hands.

HOW TO SHRINK HYPERTROPHIED TONSILS BY CAUSTIC APPLICATIONS.

Prof. Chisholm, of the University of Maryland, begins a paper on the above subject by saying: I unhesitatingly prefer excision of the enlarged gland in every case in which the patient will permit the use of the knife. It is by far the quickest, surest, and best means of securing permanent and complete relief.

In my personal experience of tonsil-cutting (and I have taken off a great many), I have never seen any trouble from hemorrhage. In fact, I have never seen any bleeding which gave me any anxiety whatever. Cases have been reported in which

* A Dictionary of Practical Medicine. By James Copland, M.D., F.R.S. Edited, with additions, by Charles Lee, A.M., M.D. In three volumes. New York: Harper & Brothers, 1859.

* Sensation and Pain. By Charles Fayette Taylor, M.D. A Lecture delivered before the New York Academy of Sciences, March 21, 1881. New York: G. P. Putnam's Sons, 1881.

very alarming hemorrhage has taken place, but this must ever be a rare accident at the hands of a skillful and cautious operator, who restricts the application of the tonsillitome to simple hypertrophies of the tonsil, and is careful how he cuts the more complex or malignant changes in the gland.

But suppose that a patient positively refuses to permit any cutting instrument to be used, what are we then to do? Such cases occur very frequently in the experience of every physician. Timid parents will not accept for their suffering children the quick, certain, and permanent relief which excision offers. At the same time they will request that treatment be instituted to relieve their children from the exposure to suffocative attacks and constant annoyances in breathing, eating, and speaking, to which these little sufferers are forced to submit. Large lumps in the throat, at all times a discomfort, swelling up under irritation till they touch at the uvula and threaten to cut off communication with the chest and abdomen, must be a serious disturbing influence in sustaining health.

Undeveloped bodies with pallid faces must be the result of this diseased state of the throat, nor is this condition of short duration. Chronic hypertrophy of the tonsil may show itself at a very early age of childhood, and usually continues up to and even after puberty. Without judicious treatment this diseased condition of the throat will continue at least during the growing period of the individual, and may possibly entail upon such patients defective hearing in addition to other annoyances. Nature, unaided, will do but little to bring about the desired relief of causing absorption of these hypertrophied glands. A general medical treatment may do much to sustain a comparatively healthy state.

Proper hygiene, fresh air, warm clothing, protection from exposure, nutritious food, with general attention to the digestive apparatus, when aided by the internal administration of cod liver oil and iron, will do much toward improving the throat.

When such treatment is instituted early enough, it will fortunately often prove successful.

I have seen no benefit from the administration of so-called absorbents, or remedies which, when taken into the circulation, are supposed to act more immediately upon the glandular system, viz., iodide of potash, iodide of ammonium, muriate of ammonia, guaiacum, etc. These, on the contrary, when given for a length of time, often disturb the digestion, and are so extremely uncertain in their shrinking action as to be of very questionable utility in removing tonsillar hypertrophies.

Nearly as much can be said of the negative results of astringents locally applied to the surface of hypertrophied tonsils to cause absorption. Such as painting the inner surface of the throat with iodine preparations, tincture of iron, glycerole of tannin, solutions of nitrate of silver, or the frequent gargling with solutions of alum, tannin, borax, muriate of ammonia, chlorate of potash, etc.

However valuable such local applications may have proved themselves in many throat affections, they are little more than placebos when used for shrinking hypertrophies of the tonsil. We have all seen cases in which some of these remedies have been assiduously applied for months with no material benefit in the permanent reduction of the throat lumps. These continue to annoy as if no local treatment had been instituted.

The local application of destructive agents alone promises no satisfactory reduction. These are usually applied to the surface of the tonsil. They are often violent in their action, difficult to limit to the tonsil proper, and, by excoriating the mucous surface to which they come in contact usually make a very painful sore throat for the patient.

These destructive applications require frequent repetition, at intervals of one or two weeks, until the enlarged gland is eaten away, as it were, by piece-meal. It is not surprising that patients suffering with hypertrophied tonsils, especially the young children, who are in such a large majority, shrink from this painful ordeal.

When the knife is not used, we must look to these caustics to effect the removal of enlarged tonsils; but there seems to me a much better method of applying these than to the exposed surface of the throat, where the good they accomplish is accompanied by so much positive discomfort. If we will utilize our knowledge of the anatomy of the tonsil, much light can be thrown upon this important subject, and a comparatively painless solution of these stubborn throat lumps can be obtained.

In the distribution of sensitive nerves, the exposed surfaces receive the larger supply according to rule, and the interior surfaces of the follicles are to a certain extent deficient in common sensation.

Here, then, we have in these deep pits of the tonsils a much more extended, less sensitive, and more easily influenced surface, to which destructive agents can be readily applied without annoying the throat proper. Caustics, if buried in the substance of the tonsil, will soon give evidence of the much desired shrinkage.

Among the various caustics for local use in causing shrinkage of tonsillar hypertrophies, I have found the chloride of zinc the most available and the least annoying to the patient. I employ it in the following manner: A wire, the size of a fine knitting needle, is roughened for a half inch from one end, so that it may hold a fibre of absorbent cotton twisted upon it. Dip this into a saturated solution of chloride of zinc, and thrust it to the very botton of the crypt, and keep it there several seconds.

When withdrawn the whitened orifice marks the cauterization. By renewing the cotton for each follicle, several may be thoroughly cauterized at the same sitting, without causing any annoying irritation to the throat. A very few applications will cause the gland to shrink, as will be seen one week after the destructive cauterization has been made to the interior of the follicles. *Virginia Medical Monthly.*

A NEW METHOD OF REDUCING DISLOCATION OF THE HIP.

In the *Transactions* of the Vt. Med. Soc., Dr. S. J. Allen writes :

"One day in the month of March, 1841, at which time I was a student of medicine in the office of John L. Swett, M. D., of Newport, N. H., I was riding in my sleigh about three miles south of the village, and passing a house situated some six rods from the road, I heard an outcry. Looking in the direction of the alarm, I saw a woman, Mrs. Perry by name, who, in stepping from the door had slipped and fallen upon the ice-covered ground. Hitching my horse, I walked rapidly towards her. As I came near, two men came out out of the house, and, raising her erect, assisted her inside.

"Grasping the leg with my right hand and the thigh with my left, I flexed the leg upon the thigh at right-angles with the body. The old lady, for thus I considered her, although but forty, complained that I hurt her badly, and somehow the limb became fixed in the position, and could not be moved. It seemed locked, and could not be moved without considerable force and pain. I immediately stepped upon the bed, and standing with her limbs between my own limbs, and placing the dorsum of her foot against my nates, with my right hand under the bend of her knee, I lifted her hips from the bed, holding her steadily in that position less than half a minute, when the head of the bone slipped into the socket, accompanied by that peculiar audiable shock which so delights the surgeon's ear. She immediately exclaimed, 'I am well, I am well.' Of course it was unnecessary to send for Dr. Swett then, as the patient was 'all right again.' Then from my directions the horse was returned to the stable.

"July 16, 1872, I was called in consultation with Dr. Sperry, of West Hartford, Vt., in the case of a French Canadian, Lewis Baumhoe, by name, a section hand on the Central Vermont railroad, who, while helping to carry a track rail, fell and struck on his right knee, the rail slipping from his shoulder, and falling on the sacrum, dislocating the right femur upon the dorsum ilii. When I arrived at West Hartford, Dr. Sperry asked me if I had my pulleys. I answered, that I had *the* pulleys that *the* Almighty furnished me with. Said the doctor, 'You can't set the legs *without pulleys*.' I answered that I could try. After the patient was chloroformed, the whole muscular system being relaxed, I stepped upon the bed, and flexed the leg upon the thigh, with the thigh at right-angles with the body, and, placing his foot between my legs, with its dorsum against my nates, and my right arm beneath the flexed knee, I lifted his hips well from the bed, and held them immovable in that position less than one-half minute, when the head of the thigh bone returned into the socket with the usual audiable sound. The reduction was accomplished so quietly that the doctor, who was standing at the patient's head, with his inhaler in hand, did not notice when it occurred, nor did he comprehend the method used, and at first questioned the fact of its having been reduced.

"By this method, the lower part of the body is lifted well from the table or bed, and held immovable. The weight of the hips and opposite leg rotates the body outwards, producing just sufficient abduction and distension to quietly draw the head of the femur through the slit in the capsular ligament, and direct it into the acetabulum. By this method no further violence is done to the soft parts about the joint; the head of the femur being drawn directly back through the rent in the capsular ligament without increasing its laceration in the least, which no other method *can* claim.

"One word in regard to other forms of dislocation of the hip. The dislocation into the ischiatic notch is a mere continuation of the dorsal form; the head of this bone being thrown simply further from the socket, it is evident that this method will quite as readily reduce this form of luxation.

"The foregoing cases, it will be observed, are all cases of dislocation of the dorsum ilii, but at the same time we should remember that luxation on the dorsum is the type of dislocations of the femur, and that before reduction is accomplished in the other and rarer forms, the head of the thigh bone must be thrown on the dorsum before it can be returned to the acetabulum. Indeed, it is not uncommon for the head of the femur to be changed from one position to the other several times during the manipulations before it can be reduced by the method of Dr. Nathan Smith. In my method the *automatic* principle is evident. The patient, being placed and held in a certain position, sets his own dislocation, thereby making him 'particeps criminis' in case of suit for mal-practice."

TREATMENT OF HIVES.

The following is said to have been successfully used to arrest hives and stop their itching :

℞	Fl. ext hyoscyamus,	ʒ iss,
	Fl. ext. juglandin,	ʒ ij,
	Oil sassafras,	ʒ j,
	Syrup,	℥ ij. M.

Sig.—One-half to one teaspoonful with impunity; repeat every ten to fifteen minutes if necessary, till relieved.

To make the cure radical I prescribe nitra-muriatic acid (use the C. P. articles only), ℥ ss, simple syrup, ℥ viiss. One teaspoonful in one-half glass of water after meals.

I have not failed to cure in a single instance with this treatment.

THE CANADA MEDICAL RECORD

A Monthly Journal of Medicine and Surgery.

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SUBSCRIPTION TWO DOLLARS PER ANNUM.

All communications and Exchanges must be addressed to the Editors, Drawer 356, Post Office, Montreal.

MONTREAL, SEPTEMBER, 1884.

COLLEGE OF PHYSICIANS AND SURGEONS.

PROVINCE OF QUEBEC.

The semi-annual meeting of the Provincial College of Physicians and Surgeons was held at Laval University, September 24, beginning at 10.20 a.m. and closing at 4.10 p.m. Dr. C. S. Lemieux, of Quebec, the president of the College, occupied the chair. Among others present were the two vice-presidents, Dr. W. H. Hingston and the Hon. J. J. Ross, Premier of Quebec, and Lieutenant-Governor Robitaille. A resolution, expressive of regret at the death of Dr. Landry, of Quebec, an old and distinguished member of the College, was unanimously adopted. The treasurer's report, showing receipts $5,322, and a balance on hand of $1,579, after paying all expenses, was also adopted, after a special committee had been named to enquire into the financial statement in detail and to report suggestions for the improvement of the actual situation. Dr. Howard submitted the report of the committee appointed to enquire into the charges laid by Dr. Lachapelle against the Victoria College, which concluded as follows: "Whereas Dr. Lachapelle, examined to-day as a witness, refuses to supply the committee with the necessary information to assist it in its investigation; whereas all the professors of the school who might be considered as implicated by the *Star* of the 10th April last have formally denied that they furnished the questions to the pupils, either directly or indirectly, it is declared that Dr. Lachapelle has refused the committee the necessary information to aid its enquiry, and that there is consequently no occasion to proceed further with Dr. Lachapelle's charges." Drs. Lanctot and Durocher having proposed the adoption of this report, Dr. Lachapelle offered some explanations. Drs. Marsden and Lamarche moved in amendment to defer the consideration of the report to next meeting. This amendment was carried by twenty-two against eleven. The following gentlemen, bearers of University diplomas, were then sworn in and duly licensed by the College: *Laval University, Quebec*—Patrick Coote, Quebec; Marie Rosaire George Matte, Quebec; Elzéar Pelletier, Rivière du Loup *(en bas)*; Eugène Larue, Quebec; Etienne Gosselin, Quebec; Joseph Arthur Millette, Agnes, Lake Megantic; Alfred Morin, St. Paul de Chester; Frédéric Stanislas Caron, Quebec. *Laval University, Montreal*—Ernest Duval, St. Jean Port Joli; Chas. Narcisse Valin, St. Hilaire, Rouville; M. T. Brennan, *Victoria University*—Odilon Berthiaume, St. Simon de Bagot; Fred. H. Daigneault, St. Joachim de Shefford; Wilbrod Fournier, St. François Rivière du Sud; Hector Leduc, Ste. Monique, Nicolet; Jean Oscar Albert Beaupré, Malone, N.Y.; Hormisdas Gauthier, St. Eustache; Roderic Mignault Acton Vale; Alfred Richard, St. Paschal, Kamouraska; Hector Brosseau, L'Acadie, comté de St. Jean. University McGill—J. O. Stewart, Andrew Stewart, C. T. Cameron, *Licentiates of the Royal College of Physicains and Surgeons, Edinburgh, (double qualification)*—James Alex. Hutchison and Benjamin Franklin W. Hurdman.

SANITARY SCIENCE.

On Sept. 27th a lecture was delivered in the Corn Exchange of this city by Dr. Stevenson MacAdam, F.R.S.E., Edinburgh, on the subject of Sanitary Science. Why the lecture was given in the place named we do not know, but the fact that only a small number were present indicates that it was somewhat of an impromptu affair. It is said that a prophet is not without honor except in his own country, and, judging by the brief remarks of after-speakers, this appears to be the case here. Our local sanitarians have again and again pointed out the requisites laid down by the lecturer, but being home productions these have fallen unheeded on the mind of our prominent citizens. The lecture is a valuable one, and we trust may bear some fruit, but there is nothing new about the subject, as the same advice could have been given by members of the medical profession here. Any one having a knowledge of the diffusion of gases is aware that they can find their way through water, and that in the case of sewer-gas the amount which thus passes through

depends on the pressure inside and outside of our sewers, and that to trap our street drains is only to increase the liability of such transmission through closet traps. When the question of trapping street gratings was discussed before the Board of Health some years ago it was then pointed out to be dangerous, and that the effect would be an increase in such infectious diseases as typhoid fever and diphtheria. As for the probability of street gratings being covered over in winter, this occurs only on the lower levels. On the higher levels many of these openings remain permanent throughout the winter, notably the one on the corner of Sherbrooke and Bleury, the steam and hot vapers arising from the drain being sufficient to keep open a shaft or chimney through the snow bank, no matter what its depth may be Our drainage system is anything but perfect, and certainly requires better ventilation, and this could be obtained without the aid of special air-shafts if all our buildings were arranged according to the system carried out in the building occupied by the Medical Faculty of Bishop's College. The plan recommended by the lecturer has been in operation in this building since its erection, over twelve years ago, and its success in preventing foul gases from entering through the closet is marked by the entire absence of the smells usually found in such places. The shaft runs upwards to the roof, and has a diameter of eight inches, and though its effect may not be appreciated, yet there can be no doubt that even the ventilation thus given to the large sewer in Ontario street must be beneficial to the houses in its neighborhood. That this system has not been adopted generally, we can only blame our architects who have the arrangements of the drainage in their hands, and if their attention is now drawn to the matter some good may result. As for our Board of Health we do not expect any intelligent reform ; its members, with few exceptions, are either ignorant of the experience of others or ignore such experience altogether, each being a sort of natural crook like medical quacks, independent of the works of those who have gone over these matters. To trap street drains would be suicidal, and should never for a moment be considered. As for the ventilation of the drains a civic by-law governing the construction of shafts in houses, together with the co-operation of our architects, should be sufficient to obtain the desired end.

Regarding disinfectants, the lecturer believed that carbolic acid and its compounds were best. We have always thought that chlorine and its compounds, as chloride of lime, were in this respect altogether better, and recent experiments have shown the view to be correct. Even in local antiseptic applications corrosive sublimate as a chlorine compound is found to be more powerful than carbolised lotions. As colonists we are generally considered by our imperial friends to be generally deficient, and many of our citizens seem to have accepted this view of themselves, as native talent or advice is not thought much of. It may be a matter of surprise to some of our influential citizens to know that all that was said at this lecture has been said over and over again for years by the professors of hygiene in the medical schools of this city and elsewhere in the Dominion.

FIFTH ANNUAL REPORT OF THE STATE BOARD OF HEALTH OF ILLINOIS.

By the courtesy of the Secretary this report has been sent us. It is quite a bulky volume of over 600 pages, and contains a mass of useful information, greatly excelling all other reports of a like nature. As a State production Illinois sets an example of enterprise and liberality which should be emulated by every State or Province in America. The compilers have ignored the boundary line between Canada and the United States, and have included both without distinction. The information found within its pages cannot be obtained elsewhere in one work; and the amount of labor expended in compiling it shows not only energy but the most praiseworthy patience in collecting correct reports from so many sources. Over 6,000 letters were sent and more than 10,000, etc., received.

To enumerate all the contents would be impossible, but the following will be sufficient to indicate the purpose of the work. In the reports of the Board it is stated that over $9,000 was expended for the accomplishment of its work ; and, contrasting this with the small amount devoted to this purpose in the Dominion, the inference is that we have not yet sufficient liberality and public spirit in our Government to care much for the welfare or the health of our people. A complete college directory is given, which includes all the existing colleges, and also information regarding those now extinct. Prefacing the colleges of each State will

be found a compendium of the laws regulating the practice of medicine therein, together with comments by correspondents of the Boards, various other data, statistics, etc., thereby increasing the usefulness of this contribution to the history of Medical Education in this country. Taking the Province of Quebec, we read the following information: Population 1,358,469; number of physicians 1051; number of inhabitants to each physician 1,292. Then follows the Act relating to the Profession of Medicine and Surgery. Each University is given, their course of instruction, requirements, fees, number of students and remarks. This can be taken as an example for what is found under the heading of each State and Province. In the summary is given the following information: In the United States there are 136 Medical Colleges; in Canada 15. This includes regular, Homœopathic, Eclectic, some which are very irregular,—none of the latter exist in Canada. In the States only 82 colleges exact an educational requirement as a condition of matriculation, and only 18 three or more courses of lectures before graduation. There are 8 colleges for women, only 6 in the U. S. and 2 in Canada. Of students of the session 1882-3 there were 12,363 in the U.S. and in Canada 856; Graduates in the U. S. 4,244, in Canada 164. The per centage of graduates to matriculates was, in the U. S., 33.9, in Canada 19.1. In the geographical distribution of physicians: In Canada there is one to every 1,112 persons—this is the smallest proportion, excepting New Mexico, which has one in 1494. The largest is Maryland, one to every 329. In Colorado, South and North Carolina and Utah, 1 to 341. The total number of students is 11,791, or an average of one in every 4,265 of the population—the newer States having the fewest number, Arizona having only 1 to every 15,000 population. Wyoming one in 20,789; Idaho one, 16,305, etc. On the other hand, the District of Columbia had one in every 1724, the older States all showing greater numbers of students. In Canada there is one student for every 4,000 of population.

The Jefferson Medical College, Philadelphia, is credited with 560 students; Rush Medical College, 545; College P. and S., New York, 536; University N.Y., 528; The Quincey Coll. of Medicine has the lowest number, 5 students; University Kansas 7.

The latter half of the volume is occupied by sanitary matters connected with the State of Illinois. The small-pox epidemic of 1880-82 and its result being thoroughly investigated. This work is a very mine of information on certain matters pertaining to medicine, especially educational, so that it repays one to read it, and as a reference it is invaluable in many respects. Much may be gathered from it of the future tendency of medical education and the progress that medical science is making. It is certainly a welcome addition to our library. The Secretary of the Board will no doubt furnish copies on application to any persons requiring them.

The following gentlemen passed the supplementary examination in the Faculty of Medicine of McGill College for the degree of M.D., C.M., held on the 16th, 17th and 18th September.

D. A. Cameron, Strathroy, Ont.; J. T. Mackenzie, Belleville, Ont.; J. A. McArthur, London, Ont., and I. C. Sharpe, New Brunswick. They will return to Montreal next Spring to receive their degree at convocation.

DENTAL BOARD OF EXAMINERS.

The regular annual meeting of the Board of Examiners began on Wednesday morning, September 17, in this city, the full Board being present, as follows: President W. Geo. Beers; Vice-President, C. F. F. Trestler; Treasurer, C. Brewster; Secretary, L. J. B. Leblanc; Registrar, C. H. Wells (Huntington); H. D. Ross (Quebec); L. W. Dowlin (Sherbrooke.)

Since the last meeting an important amendment was obtained to the Act of Incorporation, which effectually strikes at unlicensed practitioners: No person, unless holding the license of the Board, can now practise either directly or indirectly, or attempt to evade the law by causing his services as dentist to be indirectly paid by means of the sale of drugs; and physicians or surgeons who desire to practise and be publicly known as dentists must pass an examination on operative and mechanical dentistry. The same privileges and exemptions conferred upon physicians and surgeons are conferred upon dentists. The standard of study has been much improved. No person can now enter upon the study of dentistry without previously undergoing the matriculation examination prescribed by the College of Physicians and Surgeons, the same as is required to enter the study of medicine, though graduates in arts or students having matriculated in arts are exempt. Students are articled with licentiates for four years,

and are obliged to attend one full course of lectures upon anatomy (theoretical and practical), physiology, and chemistry. The examinations are of a very practical character. Not only have the students the usual written and oral examination, but a preliminary practical in operative and mechanical dentistry, extending over a month before the meeting of the Board, and are obliged to bring patients before the Board. The examinations are divided into eight parts : Anatomy and physiology, chemistry and metallurgy, anæsthetics, hygiene, operative and mechanical dentistry, dental pathology, materia medica and therapeutics, irregularities of the teeth, origin and development of the teeth. After the present year applicants for license must present a thesis which they will have to defend before the Board.

The Legislature did not empower the Board to teach, but, in lieu of regular courses of lectures which would have to be given in both languages to a very limited number of students—some years only one forthcoming—a synopsis of studies embracing the subjects of examination will be given the students, and, as has always been done, every possible gratuitous assistance is afforded by the Board to guide them in their work. Some marked improvements in this direction are being made. Owing to the numerical weakness of the profession in this Province, the use of two languages, and the absence until recently of text books in the French language, students, especially French, have been handicapped. The greatest possible liberality has always prevailed in the examinations, the students being given the written questions and allowed to answer them in their own language.

Resolutions were passed to the effect that candidates who fail to present themselves for the preliminary examination, which is optional, shall be obliged to pass the operative and mechanical branches before and by the whole Board, and that each member of the Board shall have a vote on the both subjects.

It was also resolved that no licentiate be allowed to open branch offices in which students have charge, as it is directly in contravention of the Act. The report of the Special Committee on the Act of Incorporation was received and confirmed. A vote of condolence was passed to the widow and parents of the late Edmond Pointier, of Quebec. The new by-laws were read and received, and authority given to have them printed in English and French, and distributed to the licentiates.

Several applications for examination were rejected on account of irregularity. The examinations occupied the entire two days and evenings from nine a.m. until ten p.m., and were very thorough. Some of the operations in gold, as well as the mechanical work, were highly commended by the whole Board. It was remarked by those who had been members for some years that the papers show a much higher degree of study than ever before presented. The compulsory attendance upon lectures has had a remarkable effect, while the demonstrations and preliminary examinations have also been productive of good practical results.

The following are the branches upon which the students were examined : Dental anatomy and physiology, chemistry and metallurgy, anæsthetics, hygiene, operative and mechanical dentistry, dental pathology, materia medica, therapeutics, irregularities of the teeth. The examiners on the operative and mechanical branches each presented a report of the operations, &c., performed in their presence by each student during the preliminary.

The result was the following gentlemen received their parchments and the title of licentiate of dental surgery : Messrs. John Gentles, G. J. B. Gendreau, A. A. Lantier, F. X. Tremblay, Montreal ; Mr. J. S. McKee, Quebec ; and Mr. Alf. McDiarmid, Richmond. One candidate was rejected.

It was remarked that the students who had attended the lectures on anatomy, physiology and chemistry in our Canadian Medical Colleges were very much better posted in these subjects than those who attended American Dental Colleges.

The new by-laws contain the following among other provisions :—

Before entering upon the study of dentistry in the Province of Quebec every person must, previous to signing indentures with a licentiate, present to the secretary of the board a certificate of having satisfactorily passed the matriculation examination prescribed by law (Act 46 Vict., chap. 34. sec. 7), whereupon the secretary shall register such student, and from that date his period of studentship will count.

Graduates in arts, or students having matriculated in arts in any university in her Majesty's dominions are not requirred to pass this examination, but may register their names with the secretary upon giving satisfactory proof of their qualifications and paying a fee of $10.

The period of studentship will comprise four years of actual service in the office of a licentiate, and the attendance after the second year upon at least one full course of lectures in a recognized dental or medical college upon the following subjects: Anatomy (theoretical and practical), physiology, chemistry. In practical anatomy the student must give proof of having dissected at least one head and neck.

If a student desires to attend a dental college, the actual time of such attendance will be accepted as equivalent to the same period of studentship.

Students in their third or fourth years may obtain from the secretary a brief synopsis of studies, comprising an outline of the special subjects of examination.

Any student of dentistry desiring to obtain a certificate of license to practise dentistry in the Province of Quebec is required:

1st. To be of the full age of twenty-one years.

2nd. To have complied with the requirements of the foregoing by-laws as to matriculation and studentship.

3rd. To transmit to the secretary at least one month before the date fixed for the examination, a notice of his desire to be examined for such certificate, accompanied by the treasurer's receipt for the fee of sixty dollars required by section 2 of by-law 3, and a declaration by himself, and a declaration of his preceptor according to the forms approved by the said board or to the like effect.

4th. To pass an examination before the board on the subjects embraced in section 5 of this by-law; to perform operations in the mouth, and to give practical evidence of his skill as a mechanical dentist before such examiners as may be appointed.

5th. The examinations will be written, oral and clinical, and will be divided as follows:—

1. Dental anatomy and physiology (head and neck).
2. Chemistry and metallurgy.
3. Anæsthetics, dental hygiene.
4. Operative dentistry [theoretical and practical].
5. Mechanical dentistry [theoretical and practical].
6. Dental pathology, therapeutics and materia medica.
7. Irregularities of the teeth [causes and treatment].
8. Origin and development of the teeth.

If an applicant should fail to pass the examination, forty [$40] dollars will be refunded to him.

A preliminary practical examination in operative and mechanical dentistry will be conducted by the examiners in these branches. To facilitate matters, applicants have the option of passing this, one month before the final examination, upon application to the examiners; thus giving an opportunity to make good later any deficiency that may occur. The practical examination must be passed in every case.

On and after the meeting of the board in 1885 every applicant for license must present to the secretary, a month before, an original thesis upon some practical subject in dentistry, which he must defend before the board.

The examination will be held on the third Wednesday of September in each year, unless otherwise arranged, when timely notice will be given every licentiate.

Local and General.

Nothing satisfactory has yet been determined about the cholera germ. The French Commission sent to investigate the disease in Egyyt and Koch's researches in Calcutta and Southern France have led to nothing very definite as yet, except to prove that, with ordinary care, men may spend their time cutting up cholera cadavers with impunity.

The patriotic French Commission were almost certain to be jealous of a man who, besides being a German, had the coolness to inform them not only that their Egyptian cholera germs are not peculiar to choleraics (*Blut plattchen*), but that their vaunted discovery is no discovery at all, an English observer having found them twelve years ago in the blood of people dead of cholera.

———

Who has seen a case of hydrophobia? I never did. More than that I never had the pleasure of conversing with any medical man who ever saw one. I have encountered the disease in the dog, but I consider an inhabitant of Montreal as likely to be a sufferer from yellow fever as from true rabies.

P. A. Laver, M.D.

Montreal, July, 1884.

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GERSTS

Canada medical record